Session text above this point is available in the transcript, available from the **Transcript Assistant** on the toolbar.

L8 ANSWER 73 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2003:155335 USPATFULL
TI Method and apparatus concerning bypass grafts
IN Marin, Michael L., New York, NY, United States
Marin, Ralph, New York, NY, United States
PA Teramed, Inc., United States (U.S. corporation)
PI US 6575994 B1 20030610
AI US 2000-709798 20001110 (9)
RLI Continuation of Ser. No. US 2000-504732, filed on 16 Feb 2000, now patented, Pat. No. US 6168610 Continuation of Ser. No. US 1997-838126, filed on 15 Apr 1997, now patented, Pat. No. US 6039749 Continuation of Ser. No. US 1995-537630, filed on 2 Oct 1995, now patented, Pat. No. US 5695517 Division of Ser. No. US 1994-324893, filed on 18 Oct 1994, now patented, Pat. No. US 5507764 Continuation-in-part of Ser. No. US 1994-196278, filed on 10 Feb 1994, now patented, Pat. No. US 5443477
DT Utility
FS GRANTED
LN.CNT 1313
INCL INCLM: 606/198.000
NCL NCLM: 606/198.000
IC [7]
ICM A61B017-00
IPCI A61B0017-00 [ICM,7]
IPCR A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61M0029-00 [I,A]; A61M0029-00 [I,C]
EXF 606/108; 606/194; 606/198; 606/200; 623/1.23; 623/1.32; 623/1.35; 623/1.36; 623/1.49; 623/1.51; 623/1.1; 623/1.11

L8 ANSWER 74 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2003:147140 USPATFULL
TI Mechanical apparatus and method for dilating and delivering a therapeutic agent to a site of treatment
IN Scott, Neal, Houston, TX, UNITED STATES
Segal, Jerome, Chevy Chase, CA, UNITED STATES
PI US 2003100887 A1 20030529
AI US 2002-135709 A1 20020430 (10)
RLI Continuation-in-part of Ser. No. US 2001-997855, filed on 29 Nov 2001, PENDING
DT Utility
FS APPLICATION
LN.CNT 1398
INCL INCLM: 604/509.000
INCLS: 604/103.020; 604/104.000
NCL NCLM: 604/509.000
NCLS: 604/103.020; 604/104.000
IC [7]
ICM A61M031-00
IPCI A61M0031-00 [ICM,7]
IPCR A61M0029-00 [I,A]; A61M0029-00 [I,C]; A61M0029-02 [N,A]; A61M0029-02 [N,C]

L8 ANSWER 75 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2003:147139 USPATFULL
TI Mechanical apparatus and method for dilating and delivering a therapeutic agent to a site of treatment
IN Segal, Jerome, Chevy Chase, MD, UNITED STATES
Scott, Neal, Houston, TX, UNITED STATES
PI US 2003100886 A1 20030529
AI US 2001-997855 A1 20011129 (9)
DT Utility
FS APPLICATION
LN.CNT 1336
INCL INCLM: 604/509.000
INCLS: 604/103.020; 604/104.000
NCL NCLM: 604/509.000
NCLS: 604/103.020; 604/104.000
IC [7]
ICM A61M031-00
IPCI A61M0031-00 [ICM,7]
IPCR A61M0029-00 [I,A]; A61M0029-00 [I,C]; A61M0029-02 [N,A]; A61M0029-02 [N,C]

L8 ANSWER 76 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2003:142685 USPATFULL
TI Compression plate anastomosis apparatus
IN Blatter, Duane D., Salt Lake City, UT, United States
Goodrich, Kenneth C., Salt Lake City, UT, United States
Barrus, Mike C., Bountiful, UT, United States
Burnett, Bruce M., Salt Lake City, UT, United States
PA Integrated Vascular Interventional Technologies, L.C., Salt Lake City, UT, United States (U.S. corporation)
PI US 6569173 B1 20030527
AI US 1999-460740 19991214 (9)
DT Utility
FS GRANTED
LN.CNT 2298
INCL INCLM: 606/153.000
INCLS: 606/156.000; 606/184.000
NCL NCLM: 606/153.000
NCLS: 606/156.000; 606/184.000
IC [7]
ICM A61B017-04
IPCI A61B0017-04 [ICM,7]
IPCR A61B0017-03 [I,C]; A61B0017-064 [I,A]; A61B0017-064 [I,C]; A61B0017-11 [N,A]; A61B0017-115 [I,A]; A61B0017-32 [N,A]; A61B0017-32 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]
EXF 606/152-156; 606/184

L8 ANSWER 77 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2003:113929 USPATFULL
TI Prevention of myocardial infarction induced ventricular expansion and remodeling
IN Lesniak, Jeanne M., Natick, MA, UNITED STATES
Weiner, Bonnie H., Harvard, MA, UNITED STATES
Santamore, William P., Medford, NJ, UNITED STATES

PI US 2003078671 A1 20030424
AI US 2002-278975 A1 20021024 (10)
RLI Continuation-in-part of Ser. No. US 2002-131090, filed on 25 Apr 2002, PENDING
PRAI US 2001-286521P 20010427 (60)
DT Utility
FS APPLICATION
LN.CNT 2656
INCL INCLM: 623/023.640
NCL NCLM: 623/023.640
IC [7]
ICM A61F002-04
IPCI A61F0002-04 [ICM,7]
IPCR A61B0017-00 [I,A]; A61B0017-00 [I,C]; A61B0017-04 [N,A]; A61B0017-04 [N,C]; A61B0017-064 [I,A]; A61B0017-064 [I,C]; A61B0017-068 [N,A]; A61B0017-068 [N,C]; A61B0017-34 [I,A]; A61B0017-34 [I,C]; A61F0002-00 [N,A]; A61F0002-00 [N,C]; A61F0002-02 [N,A]; A61F0002-02 [N,C]; A61F0002-24 [I,A]; A61F0002-24 [I,C]; A61K0009-00 [I,A]; A61K0009-00 [I,C]

L8 ANSWER 78 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2003:113855 USPATFULL
TI Intraluminally directed anvil apparatus and related methods and systems
IN Blatter, Duane D., Salt Lake City, UT, UNITED STATES
Goodrich, Kenneth C., Salt Lake City, UT, UNITED STATES
Barrus, Miichael C., Bountiful, UT, UNITED STATES
Burnett, Bruce M., Salt Lake City, UT, UNITED STATES
PI US 2003078597 A1 20030424
US 6726694 B2 20040427
AI US 2000-736839 A1 20001214 (9)
RLI Continuation-in-part of Ser. No. US 1999-293366, filed on 16 Apr 1999, PENDING Continuation-in-part of Ser. No. US 1999-460740, filed on 14 Dec 1999, ABANDONED
DT Utility
FS APPLICATION
LN.CNT 3599
INCL INCLM: 606/139.000
NCL NCLM: 606/139.000
NCLS: 606/153.000
IC [7]
ICM A61B017-11
IPCI A61B0017-11 [ICM,7]
IPCI-2 A61B0017-10 [ICM,7]
IPCR A61B0017-03 [I,C]; A61B0017-064 [I,A]; A61B0017-064 [I,C]; A61B0017-11 [N,A]; A61B0017-115 [I,A]; A61B0017-32 [N,A]; A61B0017-32 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]

L8 ANSWER 79 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2003:113729 USPATFULL
TI Method and apparatus for temporarily immobilizing a local area of tissue
IN Borst, Cornelius, Bilthoven, NETHERLANDS
Mansvelt Beck, Hendricus J., Bilthoven, NETHERLANDS
Grundeman, Paul F., Amsterdam, NETHERLANDS
Verlaan, Cornelis Wilhelmus Jozef, Soest, NETHERLANDS
PI US 2003078470 A1 20030424
US 2004260145 A9 20041223

AI US 2002-137159 A1 20020430 (10)
RLI Continuation of Ser. No. US 2000-678203, filed on 2 Oct 2000, PENDING Continuation-in-part of Ser. No. US 2000-493466, filed on 28 Jan 2000, GRANTED, Pat. No. US 6371906 Division of Ser. No. US 1995-531363, filed on 20 Sep 1995, GRANTED, Pat. No. US 5836311
DT Utility
FS APPLICATION
LN.CNT 1925
INCL INCLM: 600/037.000
INCLS: 128/857.000; 606/001.000; 606/201.000; 005/600.000
NCL NCLM: 600/037.000
NCLS: 005/600.000; 128/857.000; 606/001.000; 606/201.000
IC [7]
ICM A61F002-00
IPCI A61F0002-00 [ICM,7]
IPCI-2 A61F0002-00 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-02 [I,A]; A61B0017-02 [I,C]; A61B0017-30 [N,A]; A61B0017-30 [N,C]; A61B0019-00 [I,A]; A61B0019-00 [I,C]

L8 ANSWER 80 OF 180 USPATFULL on STN
Full Text | Citing References
AN 2003:100438 USPATFULL
TI Fluid exchange system for controlled and localized irrigation and aspiration
IN MacMahon, John M., Mountain View, CA, UNITED STATES
Goff, Thomas G., Menlo Park, CA, UNITED STATES
Courtney, Brian K., Palo Alto, CA, UNITED STATES
PA Kerberos Proximal Solutions (U.S. corporation)
PI US 2003069549 A1 20030410
US 6827701 B2 20041207
AI US 2002-198718 A1 20020717 (10)
PRAI US 2001-306315P 20010717 (60)
DT Utility
FS APPLICATION
LN.CNT 1857
INCL INCLM: 604/266.000
INCLS: 604/285.000
NCL NCLM: 604/038.000; 604/266.000
NCLS: 604/043.000; 604/121.000; 604/246.000; 604/285.000
IC [7]
ICM A61M031-00
ICS A61M025-00
IPCI A61M0031-00 [ICM,7]; A61M0025-00 [ICS,7]
IPCI-2 A61M0005-178 [ICM,7]; A61M0003-00 [ICS,7]; A61M0001-00 [ICS,7]; A61M0005-00 [ICS,7]
IPCR A61M0001-00 [I,A]; A61M0001-00 [I,C]

L8 ANSWER 81 OF 180 USPATFULL on STN
Full Text | Citing References
AN 2003:93901 USPATFULL
TI Ultrasonic probe device with rapid attachment and detachment means having a line contact collet
IN Hare, Bradley A., Chelmsford, MA, UNITED STATES
Rabiner, Robert A., North Reading, MA, UNITED STATES
Ranucci, Kevin J., North Attleboro, MA, UNITED STATES
Marciante, Rebecca I., North Reading, MA, UNITED STATES
Varady, Mark J., Marlborough, MA, UNITED STATES

Robertson, Roy M., Ipswich, MA, UNITED STATES
Prasad, Janniah S., Norwalk, CT, UNITED STATES
Talbot, Scott A., North Andover, MA, UNITED STATES
PA Omnisonics Medical Technologies, Inc. (U.S. corporation)
PI US 2003065263 A1 20030403
AI US 2002-268843 A1 20021010 (10)
RLI Continuation-in-part of Ser. No. US 2001-975725, filed on 11 Oct 2001, PENDING Continuation-in-part of Ser. No. US 2000-625803, filed on 26 Jul 2000, PENDING
PRAI US 1999-157824P 19991005 (60)
DT Utility
FS APPLICATION
LN.CNT 1251
INCL INCLM: 600/439.000
NCL NCLM: 600/439.000
IC [7]
ICM A61B008-00
IPCI A61B0008-00 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-22 [I,A]; A61B0017-22 [I,C]; A61B0017-32 [N,A]; A61B0017-32 [N,C]; A61N0007-00 [I,C]; A61N0007-02 [I,A]

L8 ANSWER 82 OF 180 USPATFULL on STN
Full Text Claim References
AN 2003:79550 USPATFULL
TI Encapsulated stent preform
IN Jayaraman, Swaminathan, Fremont, CA, UNITED STATES
PA Iowa-India Investments Company, Limited (U.S. corporation)
PI US 2003055479 A1 20030320
US 6746478 B2 20040608
AI US 2002-286805 A1 20021104 (10)
RLI Continuation of Ser. No. US 1999-440926, filed on 16 Nov 1999, GRANTED, Pat. No. US 6475235
DT Utility
FS APPLICATION
LN.CNT 474
INCL INCLM: 623/001.100
NCL NCLM: 623/001.150; 623/001.100
IC [7]
ICM A61F002-06
IPCI A61F0002-06 [ICM,7]
IPCI-2 A61F0002-06 [ICM,7]
IPCR A61F0002-02 [N,A]; A61F0002-02 [N,C]; A61F0002-04 [N,A]; A61F0002-04 [N,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 83 OF 180 USPATFULL on STN
Full Text Claim References
AN 2003:64276 USPATFULL
TI Methods for treating diseases and increasing longevity
IN Elia, James P., Scottsdale, AZ, UNITED STATES
PI US 2003044396 A1 20030306
AI US 2002-268833 A1 20021010 (10)
RLI Continuation-in-part of Ser. No. US 2002-179589, filed on 25 Jun 2002, PENDING Continuation-in-part of Ser. No. US 1998-64000, filed on 21 Apr 1998, PENDING
DT Utility
FS APPLICATION

LN.CNT 2697
INCL INCLM: 424/093.210
INCLS: 435/366.000
NCL NCLM: 424/093.210
NCLS: 435/366.000
IC [7]
ICM A61K048-00
ICS C12N005-08
IPCI A61K0048-00 [ICM,7]; C12N0005-08 [ICS,7]
IPCR A61K0035-32 [I,A]; A61K0035-32 [I,C]; A61K0035-44 [I,A];
A61K0035-44 [I,C]; C12N0005-06 [I,A]; C12N0005-06 [I,C]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 84 OF 180 USPATFULL on STN
Full Text | Citing References

AN 2003:31277 USPATFULL
TI Methods and systems for treating ischemia
IN Lewis, Brian Douglas, Stanford, CA, UNITED STATES
Bolduc, Lee R., Mountain View, CA, UNITED STATES
PA SALIENT INTERVENTIONAL SYSTEMS, INC. (U.S. corporation)
PI US 2003023230 A1 20030130
AI US 2002-186245 A1 20020626 (10)
RLI Continuation of Ser. No. US 1999-378089, filed on 20 Aug 1999, GRANTED, Pat. No. US 6436087 Continuation of Ser. No. US 1999-311903, filed on 14 May 1999, GRANTED, Pat. No. US 6295990 Continuation-in-part of Ser. No. US 1999-243578, filed on 3 Feb 1999, ABANDONED Continuation-in-part of Ser. No. US 1998-18214, filed on 3 Feb 1998, GRANTED, Pat. No. US 6044845
DT Utility
FS APPLICATION
LN.CNT 1451
INCL INCLM: 604/537.000
INCLS: 604/164.100; 606/191.000
NCL NCLM: 604/537.000
NCLS: 604/164.100; 606/191.000
IC [7]
ICM A61M025-16
IPCI A61M0025-16 [ICM,7]
IPCR A61B0017-22 [I,A]; A61B0017-22 [I,C]; A61M0025-00 [I,A];
A61M0025-00 [I,C]; A61M0025-01 [N,A]; A61M0025-01 [N,C];
A61M0029-02 [I,A]; A61M0029-02 [I,C]

L8 ANSWER 85 OF 180 USPATFULL on STN
Full Text | Citing References

AN 2003:24533 USPATFULL
TI Method and apparatus for performing coronary artery bypass surgery
IN Knudson, Mark B., Shoreview, MN, UNITED STATES
Giese, William L., Arlington, VA, UNITED STATES
PA HeartStent Corporation (U.S. corporation)
PI US 2003018379 A1 20030123
AI US 2002-245556 A1 20020917 (10)
RLI Continuation of Ser. No. US 1999-326819, filed on 7 Jun 1999, GRANTED, Pat. No. US 6454794 Division of Ser. No. US 1997-882397, filed on 25 Jun 1997, GRANTED, Pat. No. US 5944019 Continuation-in-part of Ser. No. US 1996-689773, filed on 13 Aug 1996, GRANTED, Pat. No. US 5755682
DT Utility
FS APPLICATION
LN.CNT 1693

INCL INCLM: 623/001.140
INCLS: 606/153.000; 623/001.150
NCL NCLM: 623/001.140
NCLS: 606/153.000; 623/001.150
IC [7]
ICM A61F002-06
IPCI A61F0002-06 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C];
A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C];
A61B0017-34 [N,A]; A61B0017-34 [N,C]; A61B0018-20 [N,C];
A61B0018-24 [N,A]; A61F0002-02 [N,A]; A61F0002-02 [N,C];
A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61F0002-24 [I,A];
A61F0002-24 [I,C]

L8 ANSWER 86 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2003:18305 USPATFULL
TI Anvil apparatus for anastomosis and related methods and systems
IN Blatter, Duane D., Salt Lake City, UT, UNITED STATES
PI US 2003014064 A1 20030116
AI US 2002-243543 A1 20020912 (10)
RLI Continuation of Ser. No. US 1999-293366, filed on 16 Apr 1999, PENDING
DT Utility
FS APPLICATION
LN.CNT 2858
INCL INCLM: 606/153.000
INCLS: 606/219.000; 227/902.000
NCL NCLM: 606/153.000
NCLS: 227/902.000; 606/219.000
IC [7]
ICM A61B017-08
ICS A61D001-00
IPCI A61B0017-08 [ICM,7]; A61D0001-00 [ICS,7]
IPCR A61B0017-03 [I,C]; A61B0017-064 [I,A]; A61B0017-064 [I,C];
A61B0017-11 [N,A]; A61B0017-115 [I,A]; A61B0017-32 [N,A];
A61B0017-32 [N,C]

L8 ANSWER 87 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2003:11439 USPATFULL
TI Aspiration method
IN Muni, Ketan P., San Jose, CA, UNITED STATES
Zadno-Azizi, Gholam Reza, Newark, CA, UNITED STATES
Bagaoisan, Celso, Union City, CA, UNITED STATES
PI US 2003009146 A1 20030109
US 6805692 B2 20041019
AI US 2002-214450 A1 20020805 (10)
RLI Continuation of Ser. No. US 2000-537471, filed on 24 Mar 2000, GRANTED, Pat. No. US 6454741 Continuation of Ser. No. US 1998-49857, filed on 27 Mar 1998, GRANTED, Pat. No. US 6135991 Continuation-in-part of Ser. No. US 1997-813807, filed on 6 Mar 1997, ABANDONED
DT Utility
FS APPLICATION
LN.CNT 998
INCL INCLM: 604/500.000
INCLS: 606/200.000; 604/096.010
NCL NCLM: 604/509.000; 604/500.000
NCLS: 604/096.010; 604/510.000; 606/200.000

```
IC      [7]
        ICM    A61M029-00
        IPCI   A61M0029-00 [ICM,7]
        IPCI-2 A61M0031-00 [ICM,7]; A61M0029-00 [ICS,7]
        IPCR   A61B0017-22 [I,A]; A61B0017-22 [I,C]; A61B0018-20 [N,C];
               A61B0018-24 [N,A]; A61M0029-02 [I,A]; A61M0029-02 [I,C]

L8   ANSWER 88 OF 180  USPATFULL on STN
```

Full Text | Citing References

```
AN      2002:336844  USPATFULL
TI      Method for growing human organs and suborgans
IN      Elia, James P., Scottsdale, AZ, UNITED STATES
PI      US 2002192198       A1   20021219
AI      US 2002-179589      A1   20020625 (10)
RLI     Continuation-in-part of Ser. No. US 1998-64000, filed on 21 Apr 1998,
        PENDING
DT      Utility
FS      APPLICATION
LN.CNT 2436
INCL    INCLM: 424/093.210
        INCLS: 435/366.000; 514/044.000
NCL     NCLM:  424/093.210
        NCLS:  435/366.000; 514/044.000
IC      [7]
        ICM    A61K048-00
        ICS    C12N005-08
        IPCI   A61K0048-00 [ICM,7]; C12N0005-08 [ICS,7]
        IPCR   A61K0035-32 [I,A]; A61K0035-32 [I,C]; A61K0035-44 [I,A];
               A61K0035-44 [I,C]; C12N0005-06 [I,A]; C12N0005-06 [I,C]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8   ANSWER 89 OF 180  USPATFULL on STN
```

Full Text | Citing References

```
AN      2002:330481  USPATFULL
TI      Prevention of myocardial infarction induced ventricular expansion and
        remodeling
IN      Santamore, William P., Medford, NJ, UNITED STATES
        Lesniak, Jeanne M., Natick, MA, UNITED STATES
PI      US 2002188170       A1   20021212
AI      US 2002-131090      A1   20020425 (10)
PRAI    US 2001-286521P      20010427 (60)
DT      Utility
FS      APPLICATION
LN.CNT 2574
INCL    INCLM: 600/037.000
        INCLS: 623/023.640; 623/002.360
NCL     NCLM:  600/037.000
        NCLS:  623/002.360; 623/023.640
IC      [7]
        ICM    A61F002-04
        IPCI   A61F0002-04 [ICM,7]
        IPCR   A61B0017-00 [I,A]; A61B0017-00 [I,C]; A61B0017-04 [N,A];
               A61B0017-04 [N,C]; A61B0017-064 [I,A]; A61B0017-064 [I,C];
               A61B0017-068 [N,A]; A61B0017-068 [N,C]; A61B0017-34 [I,A];
               A61B0017-34 [I,C]; A61F0002-00 [N,A]; A61F0002-00 [N,C];
               A61F0002-02 [N,A]; A61F0002-02 [N,C]; A61F0002-24 [I,A];
               A61F0002-24 [I,C]; A61K0009-00 [I,A]; A61K0009-00 [I,C]
```

L8 ANSWER 90 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2002:317414 USPATFULL
TI Inhibitors of serine protease activity, methods and compositions for treatment of nitric-oxide-induced clinical conditions
IN Shapiro, Leland, Denver, CO, United States
PA Trustees of University of Technology Corporation, Boulder, CO, United States (U.S. corporation)
PI US 6489308 B1 20021203
AI US 2000-518097 20000303 (9)
PRAI US 1999-123167P 19990305 (60)
US 1999-156523P 19990929 (60)
DT Utility
FS GRANTED
LN.CNT 1675
INCL INCLM: 514/045.000
INCLS: 514/454.000; 514/423.000; 514/613.000
NCL NCLM: 514/045.000
NCLS: 514/423.000; 514/454.000; 514/613.000
IC [7]
ICM A61K031-70
ICS A61K031-35; A61K031-40; A61K031-16
IPCI A61K0031-70 [ICM,7]; A61K0031-35 [ICS,7]; A61K0031-40 [ICS,7]; A61K0031-16 [ICS,7]
IPCR A61K0038-55 [I,A]; A61K0038-55 [I,C]; A61K0038-57 [I,A]
EXF 514/458; 514/455; 514/456; 514/423; 514/45; 514/454; 514/613
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 91 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2002:308704 USPATFULL
TI Intravascular flow modifier and reinforcement device with connected segments
IN Leopold, Eric W., Redwood City, CA, UNITED STATES
DeNardo, Andrew J., Carmel, IN, UNITED STATES
PI US 2002173839 A1 20021121
AI US 2002-122257 A1 20020412 (10)
RLI Continuation-in-part of Ser. No. US 2000-747456, filed on 22 Dec 2000, GRANTED, Pat. No. US 6416541 Division of Ser. No. US 1998-122243, filed on 24 Jul 1998, GRANTED, Pat. No. US 6165194
DT Utility
FS APPLICATION
LN.CNT 828
INCL INCLM: 623/001.150
NCL NCLM: 623/001.150
IC [7]
ICM A61F002-06
IPCI A61F0002-06 [ICM,7]
IPCR A61B0017-12 [N,A]; A61B0017-12 [N,C]; A61F0002-00 [N,A]; A61F0002-00 [N,C]; A61F0002-01 [N,A]; A61F0002-01 [N,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]

L8 ANSWER 92 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2002:308560 USPATFULL
TI Single cannula ventricular-assist method and apparatus
IN Landesberg, Amir, Haifa, ISRAEL

PA LEVRAM MEDICAL DEVICES, LTD (non-U.S. corporation)
PI US 2002173693 A1 20021121
US 6511413 B2 20030128
AI US 2001-858343 A1 20010516 (9)
DT Utility
FS APPLICATION
LN.CNT 1428
INCL INCLM: 600/016.000
NCL NCLM: 600/017.000; 600/016.000
NCLS: 600/016.000; 623/003.280
IC [7]
ICM A61M001-12
IPCI A61M0001-12 [ICM,7]
IPCI-2 A61N0001-362 [ICM,7]
IPCR A61M0001-10 [I,A]; A61M0001-10 [I,C]; A61M0001-12 [N,A]

L8 ANSWER 93 OF 180 USPATFULL on STN
Full Text | Cited References
AN 2002:303094 USPATFULL
TI Methods and systems for treating ischemia
IN Lewis, Brian Douglas, Stanford, CA, United States
Bolduc, Lee R., Mountain View, CA, United States
PA Salient Interventional Systems, Inc., Cupertino, CA, United States (U.S. corporation)
PI US 6481439 B1 20021119
AI US 1999-377788 19990820 (9)
RLI Continuation of Ser. No. US 1999-311903, filed on 14 May 1999, now patented, Pat. No. US 6295990 Continuation-in-part of Ser. No. US 1999-243578, filed on 3 Feb 1999, now abandoned Continuation-in-part of Ser. No. US 1998-18214, filed on 3 Feb 1998, now patented, Pat. No. US 6044845
DT Utility
FS GRANTED
LN.CNT 1473
INCL INCLM: 128/898.000
INCLS: 604/004.010; 604/007.000; 604/008.000; 604/004.000; 604/048.000; 604/500.000
NCL NCLM: 128/898.000
NCLS: 604/004.010; 604/007.000; 604/008.000; 604/048.000; 604/500.000
IC [7]
ICM A61B019-00
IPCI A61B0019-00 [ICM,7]
IPCR A61B0017-22 [I,A]; A61B0017-22 [I,C]; A61M0025-00 [I,A]; A61M0025-00 [I,C]; A61M0025-01 [N,A]; A61M0025-01 [N,C]; A61M0029-02 [I,A]; A61M0029-02 [I,C]
EXF 128/898; 604/4; 604/7; 604/8; 604/48; 604/500; 604/50; 604/51; 604/52; 604/53; 604/96; 604/102

L8 ANSWER 94 OF 180 USPATFULL on STN
Full Text | Cited References
AN 2002:290385 USPATFULL
TI Encapsulated stent preform
IN Jayaraman, Swaminathan, Fremont, CA, United States
PA Iowa-India Investments Company, Limited, Douglas, UNITED KINGDOM (non-U.S. corporation)
PI US 6475235 B1 20021105
AI US 1999-440926 19991116 (9)
DT Utility

```
FS      GRANTED
LN.CNT 484
INCL    INCLM: 623/001.150
NCL     NCLM:  623/001.150
IC      [7]
        ICM    A61F002-06
        IPCI   A61F0002-06 [ICM,7]
        IPCR   A61F0002-02 [N,A]; A61F0002-02 [N,C]; A61F0002-04 [N,A];
               A61F0002-04 [N,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]
EXF     623/1.15; 623/1.18; 623/1.21; 623/1.39; 623/1.42; 623/1.44; 623/1.46;
        623/1.53; 623/1.54

L8   ANSWER 95 OF 180  USPATFULL on STN
```

Full Text | Citing References

```
AN      2002:252148  USPATFULL
TI      Method and system for organ positioning and stabilization
IN      Keogh, James R., Maplewood, MN, UNITED STATES
        Jahns, Scott E., Hudson, WI, UNITED STATES
        Colson, Michael A., Chanhassen, MN, UNITED STATES
        Guenst, Gary W., Collegeville, PA, UNITED STATES
        Olig, Christopher, Eden Prairie, MN, UNITED STATES
        Pignato, Paul A., Stacy, MN, UNITED STATES
        Montpetit, Karen, Mendota Heights, MN, UNITED STATES
        Daigle, Thomas, Corcoran, MN, UNITED STATES
        Gubbin, Douglas H., Brooklyn Park, MN, UNITED STATES
        O'Neill, William G., Maple Grove, MN, UNITED STATES
        Jolly, Katherine, Shoreview, MN, UNITED STATES
PA      Medtronic, Inc. (U.S. corporation)
PI      US 2002138109       A1   20020926
AI      US 2002-156315      A1   20020528 (10)
RLI     Continuation of Ser. No. US 2001-879294, filed on 12 Jun 2001, PENDING
PRAI    US 2001-261343P      20010113 (60)
        US 2001-263739P      20010124 (60)
        US 2001-282029P      20010406 (60)
        US 2001-286952P      20010426 (60)
DT      Utility
FS      APPLICATION
LN.CNT 2268
INCL    INCLM: 607/009.000
NCL     NCLM:  607/009.000
IC      [7]
        ICM    A61N001-18
        IPCI   A61N0001-18 [ICM,7]
        IPCR   A61B0017-02 [I,A]; A61B0017-02 [I,C]; A61B0017-22 [N,A];
               A61B0017-22 [N,C]; A61B0017-28 [N,A]; A61B0017-28 [N,C];
               A61B0017-30 [N,A]; A61B0017-30 [N,C]; A61N0001-36 [N,A];
               A61N0001-36 [N,C]

L8   ANSWER 96 OF 180  USPATFULL on STN
```

Full Text | Citing References

```
AN      2002:246163  USPATFULL
TI      Coronary bypass implant
IN      Knudson, Mark B., Shoreview, MN, United States
        Giese, William L., Arlington, VA, United States
PA      HeartStent Corporation, St. Paul, MN, United States (U.S. corporation)
PI      US 6454794          B1   20020924
AI      US 1999-326819           19990607 (9)
RLI     Division of Ser. No. US 1997-882397, filed on 25 Jun 1997, now patented,
```

Pat. No. US 5944019 Continuation-in-part of Ser. No. US 1996-689773, filed on 13 Aug 1996, now patented, Pat. No. US 5755682, issued on 26 May 1998
DT Utility
FS GRANTED
LN.CNT 1838
INCL INCLM: 623/001.100
NCL NCLM: 623/001.100
IC [7]
ICM A61F002-24
IPCI A61F0002-24 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C]; A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]; A61B0018-20 [N,C]; A61B0018-24 [N,A]; A61F0002-02 [N,A]; A61F0002-02 [N,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61F0002-24 [I,A]; A61F0002-24 [I,C]
EXF 128/898; 606/153-156; 606/159; 606/192; 606/194; 606/195; 606/198; 600/16-18; 623/11.11; 623/23.64; 623/23.68; 623/23.7; 623/1.13; 623/1.24; 623/1.3; 623/1.31; 623/1.32; 623/1.49; 623/2.1; 623/1.1

L8 ANSWER 97 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2002:246122 USPATFULL
TI Aspiration method
IN Muni, Ketan P., San Jose, CA, United States
Zadno-Azizi, Gholam Reza, Newark, CA, United States
Bagaoisan, Celso, Union City, CA, United States
PA Medtronic Percusurge, Inc., Santa Rosa, CA, United States (U.S. corporation)
PI US 6454741 B1 20020924
AI US 2000-537471 20000324 (9)
RLI Continuation of Ser. No. US 1998-49857, filed on 27 Mar 1998, now patented, Pat. No. US 6135991 Continuation-in-part of Ser. No. US 1997-813807, filed on 6 Mar 1997, now abandoned
DT Utility
FS GRANTED
LN.CNT 1189
INCL INCLM: 604/096.010
INCLS: 604/509.000
NCL NCLM: 604/096.010
NCLS: 604/509.000
IC [7]
ICM A61M029-00
ICS A61M031-00
IPCI A61M0029-00 [ICM,7]; A61M0031-00 [ICS,7]
IPCR A61B0017-22 [I,A]; A61B0017-22 [I,C]; A61B0018-20 [N,C]; A61B0018-24 [N,A]; A61M0029-02 [I,A]; A61M0029-02 [I,C]
EXF 604/915-921; 604/507-509; 604/96.01; 604/109; 604/164.13; 606/192-200; 600/585; 600/434

L8 ANSWER 98 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2002:241510 USPATFULL
TI Electroactive polymer sensors
IN Pelrine, Ronald E., Boulder, CO, UNITED STATES
Kornbluh, Roy D., Palo Alto, CA, UNITED STATES
Pei, Qibing, Fremont, CA, UNITED STATES

Eckerle, Joseph Stephen, Redwood City, CA, UNITED STATES
PA SRI International, Menlo Park, CA, UNITED STATES, 94025 (U.S. corporation)
PI US 2002130673 A1 20020919
US 6809462 B2 20041026
AI US 2001-7705 A1 20011206 (10)
RLI Continuation-in-part of Ser. No. US 2001-828496, filed on 4 Apr 2001, PENDING
PRAI US 2001-293004P 20010522 (60)
US 2000-194817P 20000405 (60)
DT Utility
FS APPLICATION
LN.CNT 2217
INCL INCLM: 324/727.000
NCL NCLM: 310/319.000; 324/727.000
NCLS: 310/800.000
IC [7]
ICM G01R029-22
IPCI G01R0029-22 [ICM,7]
IPCI-2 H02N0002-00 [ICM,7]
IPCR A63H0003-00 [I,C]; A63H0003-36 [I,A]; H01L0041-113 [I,A]; H01L0041-113 [I,C]

L8 ANSWER 99 OF 180 USPATFULL on STN

AN 2002:228625 USPATFULL
TI Stent cover
IN Francis, Ralph T., New Brighton, MN, UNITED STATES
Zhao, Qing Hong, Andover, MN, UNITED STATES
Oray, B. Nicholas, Woodbury, MN, UNITED STATES
Metzger, Anne E., Alexandria, VA, UNITED STATES
PI US 2002123789 A1 20020905
AI US 2001-872482 A1 20010531 (9)
RLI Continuation of Ser. No. WO 1998-US25674, filed on 4 Dec 1998, UNKNOWN
DT Utility
FS APPLICATION
LN.CNT 918
INCL INCLM: 623/001.130
INCLS: 623/001.410; 623/916.000
NCL NCLM: 623/001.130
NCLS: 623/001.410; 623/916.000
IC [7]
ICM A61F002-06
IPCI A61F0002-06 [ICM,7]
IPCR A61F0002-06 [I,A]; A61F0002-06 [I,C]

L8 ANSWER 100 OF 180 USPATFULL on STN

AN 2002:208856 USPATFULL
TI Methods and systems for treating ischemia
IN Lewis, Brian Douglas, Stanford, CA, United States
Bolduc, Lee R., Mountain View, CA, United States
PA Salient Interventional Systems, Inc., Cupertino, CA, United States (U.S. corporation)
PI US 6436087 B1 20020820
AI US 1999-378089 19990820 (9)
RLI Continuation of Ser. No. US 1999-311903, filed on 14 May 1999
Continuation-in-part of Ser. No. US 1999-243578, filed on 3 Feb 1999,

now abandoned Continuation-in-part of Ser. No. US 1998-18214, filed on 3 Feb 1998, now patented, Pat. No. US 6044845
DT Utility
FS GRANTED
LN.CNT 1397
INCL INCLM: 604/508.000
INCLS: 604/500.000; 604/006.140; 604/048.000; 604/523.000; 128/898.000
NCL NCLM: 604/508.000
NCLS: 128/898.000; 604/006.140; 604/048.000; 604/500.000; 604/523.000
IC [7]
ICM A61M031-00
IPCI A61M0031-00 [ICM,7]
IPCR A61B0017-22 [I,A]; A61B0017-22 [I,C]; A61M0025-00 [I,A]; A61M0025-00 [I,C]; A61M0025-01 [N,A]; A61M0025-01 [N,C]; A61M0029-02 [I,A]; A61M0029-02 [I,C]
EXF 604/523; 604/28; 604/500; 604/507; 604/508; 604/264; 604/7; 604/8; 604/4.01; 604/6.14; 604/48; 128/898

L8 ANSWER 101 OF 180 USPATFULL on STN
Full Text | Citing References
AN 2002:208223 USPATFULL
TI Methods and systems for treating ischemia
IN Lewis, Brian Douglas, Stanford, CA, United States
Bolduc, Lee R., Mountain View, CA, United States
PA Salient Interventional Systems, Inc., Cupertino, CA, United States (U.S. corporation)
PI US 6435189 B1 20020820
AI US 1999-378621 19990820 (9)
RLI Continuation of Ser. No. US 1999-311903, filed on 14 May 1999, now patented, Pat. No. US 6295990 Continuation-in-part of Ser. No. US 1999-243578, filed on 3 Feb 1999, now abandoned Continuation-in-part of Ser. No. US 1998-18214, filed on 3 Feb 1998, now patented, Pat. No. US 6044845
DT Utility
FS GRANTED
LN.CNT 1429
INCL INCLM: 128/898.000
INCLS: 604/004.010; 604/007.000; 604/008.000; 604/048.000
NCL NCLM: 128/898.000
NCLS: 604/004.010; 604/007.000; 604/008.000; 604/048.000
IC [7]
ICM A61B019-00
IPCI A61B0019-00 [ICM,7]
IPCR A61B0017-22 [I,A]; A61B0017-22 [I,C]; A61M0025-00 [I,A]; A61M0025-00 [I,C]; A61M0025-01 [N,A]; A61M0025-01 [N,C]; A61M0029-02 [I,A]; A61M0029-02 [I,C]
EXF 128/898; 604/4; 604/7; 604/8; 604/48; 604/49; 604/50; 604/51; 604/52; 604/53; 604/96; 604/102; 604/101.01-101.03; 604/101.05; 604/102.01; 604/500; 604/65; 604/509; 604/508; 604/28; 606/194; 606/28

L8 ANSWER 102 OF 180 USPATFULL on STN
Full Text | Citing References
AN 2002:179382 USPATFULL
TI Flexible instrument
IN Brock, David L., Natick, MA, UNITED STATES
Lee, Woojin, Hopkinton, MA, UNITED STATES
Rogers, Gary, Wenham, MA, UNITED STATES
Weitzner, Barry, Acton, MA, UNITED STATES

PI US 2002095175 A1 20020718
AI US 2001-23024 A1 20011116 (10)
RLI Continuation-in-part of Ser. No. US 2001-827503, filed on 6 Apr 2001, PENDING Continuation of Ser. No. US 2000-746853, filed on 21 Dec 2000, PENDING Division of Ser. No. US 1999-375666, filed on 17 Aug 1999, GRANTED, Pat. No. US 6197017 Continuation of Ser. No. US 1998-28550, filed on 24 Feb 1998, ABANDONED Continuation-in-part of Ser. No. US 2001-783637, filed on 14 Feb 2001, PENDING Continuation of Ser. No. WO 2000-US12553, filed on 9 May 2000, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US11376, filed on 6 Apr 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-827643, filed on 6 Apr 2001, PENDING Continuation-in-part of Ser. No. WO 2000-US12553, filed on 9 May 2000, UNKNOWN
PRAI US 1999-133407P 19990510 (60)
US 2000-257869P 20001221 (60)
US 2000-195264P 20000407 (60)
US 2001-293346P 20010524 (60)
US 2001-279087P 20010327 (60)
US 2001-313496P 20010821 (60)
US 2001-313497P 20010821 (60)
US 2001-313495P 20010821 (60)
US 2001-269203P 20010215 (60)
US 2001-269200P 20010215 (60)
US 2001-276151P 20010315 (60)
US 2001-276217P 20010315 (60)
US 2001-276086P 20010315 (60)
US 2001-276152P 20010315 (60)
US 2000-257816P 20001221 (60)
US 2000-257868P 20001221 (60)
US 2000-257867P 20001221 (60)
US 2000-257869P 20001221 (60)
DT Utility
FS APPLICATION
LN.CNT 2475
INCL INCLM: 606/205.000
INCLS: 606/001.000
NCL NCLM: 606/205.000
NCLS: 606/001.000
IC [7]
ICM A61B017-00
IPCI A61B0017-00 [ICM,7]
IPCR A61B0005-00 [N,A]; A61B0005-00 [N,C]; A61B0005-04 [I,A]; A61B0005-04 [I,C]; A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-28 [N,A]; A61B0017-28 [N,C]; A61B0019-00 [I,A]; A61B0019-00 [I,C]; B25J0003-00 [I,C]; B25J0003-04 [I,A]; B25J0009-10 [I,A]; B25J0009-10 [I,C]

L8 ANSWER 103 OF 180 USPATFULL on STN
Full Text | Cited References
AN 2002:179376 USPATFULL
TI Shape memory polymer actuator and catheter
IN Maitland, Duncan J., Pleasant Hill, CA, UNITED STATES
Lee, Abraham P., Walnut Creek, CA, UNITED STATES
Schumann, Daniel L., Concord, CA, UNITED STATES
Matthews, Dennis L., Moss Beach, CA, UNITED STATES
Decker, Derek E., Byron, CA, UNITED STATES
Jungreis, Charles A., Pittsburg, PA, UNITED STATES
PA The Regents of the University of California (U.S. corporation)
PI US 2002095169 A1 20020718

```
       US 6740094          B2   20040525
AI     US 2001-761023      A1   20010116 (9)
PRAI   US 2000-246293P      20001106 (60)
DT     Utility
FS     APPLICATION
LN.CNT 1047
INCL   INCLM: 606/194.000
NCL    NCLM:  606/108.000; 606/194.000
IC     [7]
       ICM    A61M029-00
       IPCI   A61M0029-00 [ICM,7]
       IPCI-2 A61F0011-00 [ICM,7]
       IPCR   A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-22 [I,A];
              A61B0017-22 [I,C]

L8   ANSWER 104 OF 180  USPATFULL on STN
```

Full Text | Citing References

```
AN     2002:179346  USPATFULL
TI     METHOD FOR ORGAN POSITIONING AND STABILIZATION
IN     Keogh, James R., Maplewood, MN, UNITED STATES
       Jahns, Scott E., Hudson, WI, UNITED STATES
       Colson, Michael A., Chanhassen, MN, UNITED STATES
       Guenst, Gary W., Collegeville, PA, UNITED STATES
       Olig, Christopher, Eden Prairie, MN, UNITED STATES
       Pignato, Paul A., Stacy, MN, UNITED STATES
       Montpetit, Karen, Mendota Heights, MN, UNITED STATES
       Daigle, Thomas, Corcoran, MN, UNITED STATES
       Gubbin, Douglas H., Brooklyn Park, MN, UNITED STATES
       O'Neill, William G., Maple Grove, MN, UNITED STATES
       Jolly, Katherine, Shoreview, MN, UNITED STATES
PI     US 2002095139       A1   20020718
       US 6447443          B2   20020910
AI     US 2001-879294      A1   20010612 (9)
PRAI   US 2001-261343P      20010113 (60)
       US 2001-263739P      20010124 (60)
       US 2001-282029P      20010406 (60)
       US 2001-286952P      20010426 (60)
DT     Utility
FS     APPLICATION
LN.CNT 2269
INCL   INCLM: 606/001.000
       INCLS: 600/235.000
NCL    NCLM:  600/037.000; 606/001.000
       NCLS:  128/898.000; 600/205.000; 600/232.000; 600/235.000
IC     [7]
       ICM    A61B017-00
       IPCI   A61B0017-00 [ICM,7]
       IPCI-2 A61F0002-00 [ICM,7]; A61B0001-32 [ICS,7]; A61B0019-00 [ICS,7]
       IPCR   A61B0017-02 [I,A]; A61B0017-02 [I,C]; A61B0017-22 [N,A];
              A61B0017-22 [N,C]; A61B0017-28 [N,A]; A61B0017-28 [N,C];
              A61B0017-30 [N,A]; A61B0017-30 [N,C]; A61N0001-36 [N,A];
              A61N0001-36 [N,C]

L8   ANSWER 105 OF 180  USPATFULL on STN
```

Full Text | Citing References

```
AN     2002:172589  USPATFULL
TI     Method and device for preventing contrast associated nephropathy
IN     Reich, David, Riverdale, NY, UNITED STATES
```

PA Mount Sinal School of Medicine of New York Univerysity (U.S. corporation)
PI US 2002091349 A1 20020711
US 6554819 B2 20030429
AI US 2001-757301 A1 20010109 (9)
DT Utility
FS APPLICATION
LN.CNT 325
INCL INCLM: 604/005.010
INCLS: 604/096.010
NCL NCLM: 604/508.000; 604/005.010
NCLS: 604/004.010; 604/006.090; 604/509.000; 604/096.010
IC [7]
ICM A61M037-00
ICS A61M029-00
IPCI A61M0037-00 [ICM,7]; A61M0029-00 [ICS,7]
IPCI-2 A61M0037-00 [ICM,7]; A61M0031-00 [ICS,7]
IPCR A61M0001-36 [I,A]; A61M0001-36 [I,C]; A61M0031-00 [I,A]; A61M0031-00 [I,C]

L8 ANSWER 106 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2002:165533 USPATFULL
TI Flexible instrument
IN Brock, David L., Natick, MA, UNITED STATES
Lee, Woojin, Hopkinton, MA, UNITED STATES
Rogers, Gary, Wenham, MA, UNITED STATES
Weitzner, Barry, Acton, MA, UNITED STATES
Cunningham, Robert W., Cohasset, MA, UNITED STATES
PI US 2002087169 A1 20020704
AI US 2001-10150 A1 20011116 (10)
RLI Continuation-in-part of Ser. No. US 2001-827503, filed on 6 Apr 2001, PENDING Continuation of Ser. No. US 2000-746853, filed on 21 Dec 2000, PENDING Division of Ser. No. US 1999-375666, filed on 17 Aug 1999, GRANTED, Pat. No. US 6197017 Continuation of Ser. No. US 1998-28550, filed on 24 Feb 1998, ABANDONED Continuation-in-part of Ser. No. US 2001-783637, filed on 14 Feb 2001, PENDING Continuation of Ser. No. WO 2000-US12553, filed on 9 May 2000, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US11376, filed on 6 Apr 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-827643, filed on 6 Apr 2001, PENDING Continuation-in-part of Ser. No. WO 2000-US12553, filed on 9 May 2000, UNKNOWN
PRAI US 1999-133407P 19990510 (60)
US 2000-257869P 20001221 (60)
US 2000-195264P 20000407 (60)
US 2001-293346P 20010524 (60)
US 2001-279087P 20010327 (60)
US 2001-313496P 20010821 (60)
US 2001-313497P 20010821 (60)
US 2001-313495P 20010821 (60)
US 2001-269203P 20010215 (60)
US 2001-269200P 20010215 (60)
US 2001-276151P 20010315 (60)
US 2001-276217P 20010315 (60)
US 2001-276086P 20010315 (60)
US 2001-276152P 20010315 (60)
US 2000-257816P 20001221 (60)
US 2000-257868P 20001221 (60)
US 2000-257867P 20001221 (60)

```
DT      Utility
FS      APPLICATION
LN.CNT 2564
INCL    INCLM: 606/139.000
NCL     NCLM:  606/139.000
IC      [7]
        ICM    A61B017-10
        IPCI   A61B0017-10 [ICM,7]
        IPCR   A61B0005-00 [N,A]; A61B0005-00 [N,C]; A61B0005-04 [I,A];
               A61B0005-04 [I,C]; A61B0017-00 [N,A]; A61B0017-00 [N,C];
               A61B0017-28 [N,A]; A61B0017-28 [N,C]; A61B0019-00 [I,A];
               A61B0019-00 [I,C]; B25J0003-00 [I,C]; B25J0003-04 [I,A];
               B25J0009-10 [I,A]; B25J0009-10 [I,C]

L8   ANSWER 107 OF 180  USPATFULL on STN
```

Full Text | Citing References

```
AN      2002:165530  USPATFULL
TI      Flexible instrument
IN      Brock, David L., Natick, MA, UNITED STATES
        Lee, Woojin, Hopkinton, MA, UNITED STATES
        Rogers, Gary, Wenham, MA, UNITED STATES
        Weitzner, Barry, Acton, MA, UNITED STATES
        Ailinger, Robert E., Norwood, MA, UNITED STATES
PI      US 2002087166      A1   20020704
AI      US 2001-11371      A1   20011116 (10)
RLI     Continuation-in-part of Ser. No. US 2001-827503, filed on 6 Apr 2001,
        PENDING Continuation of Ser. No. US 2000-746853, filed on 21 Dec 2000,
        PENDING Division of Ser. No. US 1999-375666, filed on 17 Aug 1999,
        GRANTED, Pat. No. US 6197017 Continuation of Ser. No. US 1998-28550,
        filed on 24 Feb 1998, ABANDONED Continuation-in-part of Ser. No. US
        2001-783637, filed on 14 Feb 2001, PENDING Continuation of Ser. No. WO
        2000-US12553, filed on 9 May 2000, UNKNOWN Continuation-in-part of Ser.
        No. WO 2001-US11376, filed on 6 Apr 2001, UNKNOWN Continuation-in-part
        of Ser. No. US 2001-827643, filed on 6 Apr 2001, PENDING
        Continuation-in-part of Ser. No. WO 2000-US12553, filed on 9 May 2000,
        UNKNOWN
PRAI    US 1999-133407P     19990510 (60)
        US 2000-257869P     20001221 (60)
        US 2000-195264P     20000407 (60)
        US 2001-293346P     20010524 (60)
        US 2001-279087P     20010327 (60)
        US 2001-313496P     20010821 (60)
        US 2001-313497P     20010821 (60)
        US 2001-313495P     20010821 (60)
        US 2001-269203P     20010215 (60)
        US 2001-269200P     20010215 (60)
        US 2001-276151P     20010315 (60)
        US 2001-276217P     20010315 (60)
        US 2001-276086P     20010315 (60)
        US 2001-276152P     20010315 (60)
        US 2000-257816P     20001221 (60)
        US 2000-257868P     20001221 (60)
        US 2000-257867P     20001221 (60)
        US 2000-257869P     20001221 (60)
DT      Utility
FS      APPLICATION
LN.CNT 2502
INCL    INCLM: 606/130.000
NCL     NCLM:  606/130.000
```

IC [7]
ICM A61B019-00
IPCI A61B0019-00 [ICM,7]
IPCR A61B0005-00 [N,A]; A61B0005-00 [N,C]; A61B0005-04 [I,A];
A61B0005-04 [I,C]; A61B0017-00 [N,A]; A61B0017-00 [N,C];
A61B0017-28 [N,A]; A61B0017-28 [N,C]; A61B0019-00 [I,A];
A61B0019-00 [I,C]; B25J0003-00 [I,C]; B25J0003-04 [I,A];
B25J0009-10 [I,A]; B25J0009-10 [I,C]

L8 ANSWER 108 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2002:165512 USPATFULL
TI Flexible instrument
IN Brock, David L., Natick, MA, UNITED STATES
Lee, Woojin, Hopkinton, MA, UNITED STATES
Rogers, Gary, Wenham, MA, UNITED STATES
Weitzner, Barry, Acton, MA, UNITED STATES
PI US 2002087148 A1 20020704
AI US 2001-22038 A1 20011116 (10)
RLI Continuation-in-part of Ser. No. US 2001-827503, filed on 6 Apr 2001, PENDING Continuation of Ser. No. US 2000-746853, filed on 21 Dec 2000, PENDING Division of Ser. No. US 1999-375666, filed on 17 Aug 1999, GRANTED, Pat. No. US 6197017 Continuation of Ser. No. US 1998-28550, filed on 24 Feb 1998, ABANDONED Continuation-in-part of Ser. No. US 2001-783637, filed on 14 Feb 2001, PENDING Continuation of Ser. No. WO 2000-US12553, filed on 9 May 2000, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US11376, filed on 6 Apr 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-827643, filed on 6 Apr 2001, PENDING
PRAI US 1999-133407P 19990510 (60)
US 2000-257869P 20001221 (60)
US 2000-195264P 20000407 (60)
US 2001-293346P 20010524 (60)
US 2001-279087P 20010327 (60)
US 2001-313497P 20010821 (60)
US 2001-313495P 20010821 (60)
US 2001-269203P 20010215 (60)
US 2001-276086P 20010315 (60)
US 2001-276152P 20010315 (60)
US 2000-257816P 20001221 (60)
US 2000-257868P 20001221 (60)
US 2000-257867P 20001221 (60)
US 2000-257869P 20001221 (60)
US 2001-269203P 20010215 (60)
US 2001-269200P 20010215 (60)
US 2001-276151P 20010315 (60)
US 2001-276217P 20010315 (60)
US 2001-313496P 20010821 (60)
DT Utility
FS APPLICATION
LN.CNT 2397
INCL INCLM: 606/001.000
NCL NCLM: 606/001.000
IC [7]
ICM A61B017-00
IPCI A61B0017-00 [ICM,7]
IPCR A61B0005-00 [N,A]; A61B0005-00 [N,C]; A61B0005-04 [I,A];
A61B0005-04 [I,C]; A61B0017-00 [N,A]; A61B0017-00 [N,C];
A61B0017-28 [N,A]; A61B0017-28 [N,C]; A61B0019-00 [I,A];
A61B0019-00 [I,C]; B25J0003-00 [I,C]; B25J0003-04 [I,A];

B25J0009-10 [I,A]; B25J0009-10 [I,C]

L8 ANSWER 109 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2002:165413 USPATFULL
TI Flexible instrument
IN Brock, David L., Natick, MA, UNITED STATES
Lee, Woojin, Hopkinton, MA, UNITED STATES
Rogers, Gary, Wenham, MA, UNITED STATES
Weitzner, Barry, Acton, MA, UNITED STATES
PI US 2002087049 A1 20020704
AI US 2001-12586 A1 20011116 (10)
RLI Continuation-in-part of Ser. No. US 2001-827503, filed on 6 Apr 2001, PENDING Continuation of Ser. No. US 2000-746853, filed on 21 Dec 2000, PENDING Division of Ser. No. US 1999-375666, filed on 17 Aug 1999, GRANTED, Pat. No. US 6197017 Continuation of Ser. No. US 1998-28550, filed on 24 Feb 1998, ABANDONED Continuation-in-part of Ser. No. US 2001-783637, filed on 14 Feb 2001, PENDING Continuation of Ser. No. WO 2000-US12553, filed on 9 May 2000, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US11376, filed on 6 Apr 2001, UNKNOWN Continuation-in-part of Ser. No. US 2000-746853, filed on 21 Dec 2000, PENDING Continuation-in-part of Ser. No. WO 2000-US12553, filed on 9 May 2000, UNKNOWN
PRAI US 1999-133407P 19990510 (60)
US 2000-257869P 20001221 (60)
US 2000-195264P 20000407 (60)
US 2001-293346P 20010524 (60)
US 2001-279087P 20010327 (60)
US 2001-313496P 20010821 (60)
US 2001-313497P 20010821 (60)
US 2001-313495P 20010821 (60)
US 2001-269203P 20010215 (60)
US 2001-269200P 20010215 (60)
US 2001-276151P 20010315 (60)
US 2001-276217P 20010315 (60)
US 2001-276086P 20010315 (60)
US 2001-276152P 20010315 (60)
US 2000-257816P 20001221 (60)
US 2000-257868P 20001221 (60)
US 2000-257867P 20001221 (60)
US 2000-257869P 20001221 (60)
DT Utility
FS APPLICATION
LN.CNT 2393
INCL INCLM: 600/114.000
NCL NCLM: 600/114.000
IC [7]
ICM A61B001-04
IPCI A61B0001-04 [ICM,7]
IPCR A61B0005-00 [N,A]; A61B0005-00 [N,C]; A61B0005-04 [I,A]; A61B0005-04 [I,C]; A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-28 [N,A]; A61B0017-28 [N,C]; A61B0019-00 [I,A]; A61B0019-00 [I,C]; B25J0003-00 [I,C]; B25J0003-04 [I,A]; B25J0009-10 [I,A]; B25J0009-10 [I,C]

L8 ANSWER 110 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2002:165412 USPATFULL

TI Flexible instrument
IN Brock, David L., Natick, MA, UNITED STATES
Lee, Woojin, Hopkinton, MA, UNITED STATES
Rogers, Gary, Wenham, MA, UNITED STATES
Weitzner, Barry, Acton, MA, UNITED STATES
PI US 2002087048 A1 20020704
AI US 2001-11449 A1 20011116 (10)
RLI Continuation-in-part of Ser. No. US 2001-827503, filed on 6 Apr 2001, PENDING Continuation of Ser. No. US 2000-746853, filed on 21 Dec 2000, PENDING Division of Ser. No. US 1999-375666, filed on 17 Aug 1999, GRANTED, Pat. No. US 6197017 Continuation of Ser. No. US 1998-28550, filed on 24 Feb 1998, ABANDONED Continuation-in-part of Ser. No. US 2001-783637, filed on 14 Feb 2001, PENDING Continuation of Ser. No. WO 2000-US12553, filed on 9 May 2000, UNKNOWN Continuation-in-part of Ser. No. WO 2001-US11376, filed on 6 Apr 2001, UNKNOWN Continuation-in-part of Ser. No. US 2001-827643, filed on 6 Apr 2001, PENDING Continuation-in-part of Ser. No. WO 2000-US12553, filed on 9 May 2000, UNKNOWN
PRAI US 1999-133407P 19990510 (60)
US 2000-257869P 20001221 (60)
US 2000-195264P 20000407 (60)
US 2001-293346P 20010524 (60)
US 2001-279087P 20010327 (60)
US 2001-313496P 20010821 (60)
US 2001-313497P 20010821 (60)
US 2001-313495P 20010821 (60)
US 2001-269203P 20010215 (60)
US 2001-269200P 20010215 (60)
US 2001-276151P 20010315 (60)
US 2001-276217P 20010315 (60)
US 2001-276086P 20010315 (60)
US 2001-276152P 20010315 (60)
US 2000-257816P 20001221 (60)
US 2000-257868P 20001221 (60)
US 2000-257867P 20001221 (60)
US 2000-257869P 20001221 (60)
DT Utility
FS APPLICATION
LN.CNT 2413
INCL INCLM: 600/114.000
NCL NCLM: 600/114.000
IC [7]
ICM A61B001-04
IPCI A61B0001-04 [ICM,7]
IPCR A61B0005-00 [N,A]; A61B0005-00 [N,C]; A61B0005-04 [I,A]; A61B0005-04 [I,C]; A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-28 [N,A]; A61B0017-28 [N,C]; A61B0019-00 [I,A]; A61B0019-00 [I,C]; B25J0003-00 [I,C]; B25J0003-04 [I,A]; B25J0009-10 [I,A]; B25J0009-10 [I,C]

L8 ANSWER 111 OF 180 USPATFULL on STN

Full Text | String References

AN 2002:149360 USPATFULL
TI Device and method for dilating and irradiating a vascular segment or body passageway
IN Segal, Jerome, Chevy Chase, MD, UNITED STATES
Hampikian, Janet M., Decatur, GA, UNITED STATES
Scott, Neal A., Decatur, GA, UNITED STATES
PI US 2002077520 A1 20020620

AI US 2000-735239 A1 20001213 (9)
RLI Continuation-in-part of Ser. No. US 1999-386779, filed on 31 Aug 1999, PENDING
PRAI US 1999-141766P 19990630 (60)
US 1998-108963P 19981118 (60)
DT Utility
FS APPLICATION
LN.CNT 2571
INCL INCLM: 600/001.000
NCL NCLM: 600/001.000
IC [7]
ICM A61N005-00
IPCI A61N0005-00 [ICM,7]
IPCR A61F0002-00 [N,A]; A61F0002-00 [N,C]; A61M0025-00 [I,A]; A61M0025-00 [I,C]; A61M0036-00 [N,A]; A61M0036-00 [N,C]; A61N0005-10 [I,A]; A61N0005-10 [I,C]; C09D0005-00 [I,A]; C09D0005-00 [I,C]; C09D0005-44 [I,A]; C09D0005-44 [I,C]; C09D0007-12 [I,A]; C09D0007-12 [I,C]; C23C0018-00 [I,C]; C23C0018-12 [I,A]; C23C0018-16 [I,A]; C23C0018-16 [I,C]; C25D0003-02 [I,A]; C25D0003-02 [I,C]; C25D0015-00 [I,C]; C25D0015-02 [I,A]

L8 ANSWER 112 OF 180 USPATFULL on STN
Full Text | Citing References
AN 2002:141710 USPATFULL
TI Transmyocardial implant with improved flow
IN Knudson, Mark B., Shoreview, MN, UNITED STATES
Giese, William L., Arlington, VA, UNITED STATES
PA HeartStent Corporation, St. Paul, MN (U.S. corporation)
PI US 2002072699 A1 20020613
AI US 2002-76735 A1 20020215 (10)
RLI Continuation of Ser. No. US 1999-326819, filed on 7 Jun 1999, PENDING
Division of Ser. No. US 1997-882397, filed on 25 Jun 1997, PATENTED
Continuation-in-part of Ser. No. US 1996-689773, filed on 13 Aug 1996, PATENTED
DT Utility
FS APPLICATION
LN.CNT 1700
INCL INCLM: 604/008.000
NCL NCLM: 604/008.000
IC [7]
ICM A61M005-00
ICS A61F002-06
IPCI A61M0005-00 [ICM,7]; A61F0002-06 [ICS,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C]; A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]; A61B0018-20 [N,C]; A61B0018-24 [N,A]; A61F0002-02 [N,A]; A61F0002-02 [N,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61F0002-24 [I,A]; A61F0002-24 [I,C]

L8 ANSWER 113 OF 180 USPATFULL on STN
Full Text | Citing References
AN 2002:126960 USPATFULL
TI Method and apparatus for revascularizing a coronary vessel with an implant having a tapered myocardial leg
IN Knudson, Mark B., Shoreview, MN, UNITED STATES
Giese, William L., Arlington, VA, UNITED STATES

PA HeartStent Corporation, St. Paul, MN, UNITED STATES, 55112 (U.S. corporation)
PI US 2002065478 A1 20020530
US 6701932 B2 20040309
AI US 2002-43684 A1 20020109 (10)
RLI Continuation of Ser. No. US 1999-326819, filed on 7 Jun 1999, PENDING
Division of Ser. No. US 1997-882397, filed on 25 Jun 1997, PATENTED
Continuation-in-part of Ser. No. US 1996-689773, filed on 13 Aug 1996, PATENTED
DT Utility
FS APPLICATION
LN.CNT 1712
INCL INCLM: 604/008.000
NCL NCLM: 128/898.000; 604/008.000
IC [7]
ICM A61F002-06
IPCI A61F0002-06 [ICM,7]
IPCI-2 A61B0017-00 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C]; A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]; A61B0018-20 [N,C]; A61B0018-24 [N,A]; A61F0002-02 [N,A]; A61F0002-02 [N,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61F0002-24 [I,A]; A61F0002-24 [I,C]

L8 ANSWER 114 OF 180 USPATFULL on STN
Full Text | Citing References
AN 2002:92960 USPATFULL
TI Method and apparatus for performing coronary artery bypass surgery
IN Knudson, Mark B., Shoreview, MN, UNITED STATES
Giese, William L., Arlington, VA, UNITED STATES
PA HeartStent Corporation, St. Paul, MN (U.S. corporation)
PI US 2002049486 A1 20020425
AI US 2001-845527 A1 20010430 (9)
RLI Continuation of Ser. No. US 1999-326819, filed on 7 Jun 1999, PENDING
Continuation-in-part of Ser. No. US 1996-689773, filed on 13 Aug 1996, PATENTED
DT Utility
FS APPLICATION
LN.CNT 1694
INCL INCLM: 623/001.100
INCLS: 606/153.000; 606/155.000; 623/001.350; 604/008.000
NCL NCLM: 623/001.100
NCLS: 604/008.000; 606/153.000; 606/155.000; 623/001.350
IC [7]
ICM A61F002-06
ICS A61B017-08
IPCI A61F0002-06 [ICM,7]; A61B0017-08 [ICS,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C]; A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]; A61B0018-20 [N,C]; A61B0018-24 [N,A]; A61F0002-02 [N,A]; A61F0002-02 [N,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61F0002-24 [I,A]; A61F0002-24 [I,C]

L8 ANSWER 115 OF 180 USPATFULL on STN
Full Text | Citing References
AN 2002:87698 USPATFULL

TI Micro-motor actuated therapeutic device
IN Hastings, Roger, Maple Grove, MN, United States
Larson, Kenneth, Maple Grove, MN, United States
Berman, Michael, Golden Valley, MN, United States
Lafontaine, Daniel M., Plymouth, MN, United States
PA Scimed Life Systems, Inc., Maple Grove, MN, United States (U.S. corporation)
PI US 6375609 B1 20020423
AI US 2000-563326 20000503 (9)
RLI Continuation of Ser. No. US 1999-258361, filed on 26 Feb 1999, now patented, Pat. No. US 6089235 Division of Ser. No. US 1997-795602, filed on 5 Feb 1997, now patented, Pat. No. US 5823199 Division of Ser. No. US 1994-343045, filed on 21 Nov 1994, now patented, Pat. No. US 5628719 Continuation-in-part of Ser. No. US 1992-981612, filed on 25 Nov 1992, now abandoned
DT Utility
FS GRANTED
LN.CNT 1268
INCL INCLM: 600/104.000
NCL NCLM: 600/104.000
IC [7]
ICM A61B019-00
IPCI A61B0019-00 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61M0001-10 [I,A]; A61M0001-10 [I,C]; A61M0025-10 [I,A]; A61M0025-10 [I,C]
EXF 128/899; 060/104; 060/106; 060/115; 060/116; 060/137; 060/183

L8 ANSWER 116 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2002:63312 USPATFULL
TI Mesh tip myocardial implant
IN Knudson, Mark B., Shoreview, MN, United States
Giese, William L., Arlington, VA, United States
PA HeartStent Corporation, St. Paul, MN, United States (U.S. corporation)
PI US 6361519 B1 20020326
AI US 2000-548175 20000413 (9)
RLI Continuation of Ser. No. US 1998-55488, filed on 3 Apr 1998, now patented, Pat. No. US 6093166 Continuation of Ser. No. US 1996-689773, filed on 13 Aug 1996, now patented, Pat. No. US 5755682
DT Utility
FS GRANTED
LN.CNT 1834
INCL INCLM: 604/008.000
INCLS: 606/151.000; 623/001.100; 623/001.120; 600/016.000
NCL NCLM: 604/008.000
NCLS: 600/016.000; 606/151.000; 623/001.100; 623/001.120
IC [7]
ICM A61M005-00
ICS A61M039-00; A61F002-04; A61F002-06
IPCI A61M0005-00 [ICM,7]; A61M0039-00 [ICS,7]; A61F0002-04 [ICS,7]; A61F0002-06 [ICS,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C]; A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]; A61B0018-20 [N,C]; A61B0018-24 [N,A]; A61F0002-02 [N,A]; A61F0002-02 [N,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61F0002-24 [I,A]; A61F0002-24 [I,C]
EXF 604/8; 606/151; 623/1.1; 623/1.12; 600/16

L8 ANSWER 117 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2002:39471 USPATFULL
TI Expandable myocardial implant
IN Knudson, Mark B., Shoreview, MN, United States
Giese, William L., Arlington, VA, United States
PA HeartStent Corporation, St. Paul, MN, United States (U.S. corporation)
PI US 6350248 B1 20020226
AI US 2000-548173 20000413 (9)
RLI Continuation of Ser. No. US 1998-55488, filed on 3 Apr 1998, now patented, Pat. No. US 6093166 Continuation of Ser. No. US 1996-689773, filed on 13 Aug 1996, now patented, Pat. No. US 5755682
DT Utility
FS GRANTED
LN.CNT 1835
INCL INCLM: 604/008.000
INCLS: 623/001.100; 623/001.120; 600/016.000; 606/151.000; 128/898.000
NCL NCLM: 604/008.000
NCLS: 128/898.000; 600/016.000; 606/151.000; 623/001.100; 623/001.120
IC [7]
ICM A61F002-06
ICS A61B017-00
IPCI A61F0002-06 [ICM,7]; A61B0017-00 [ICS,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C]; A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]; A61B0018-20 [N,C]; A61B0018-24 [N,A]; A61F0002-02 [N,A]; A61F0002-02 [N,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61F0002-24 [I,A]; A61F0002-24 [I,C]
EXF 623/1.1; 623/1.12; 604/8; 606/151; 600/16; 128/898

L8 ANSWER 118 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2002:4388 USPATFULL
TI Fiber optic laser catheter and method of using it
IN Levatter, Jeffrey I., Rancho Santa Fe, CA, UNITED STATES
PI US 2002002370 A1 20020103
AI US 2001-784294 A1 20010214 (9)
RLI Continuation of Ser. No. US 1998-168328, filed on 30 Sep 1998, ABANDONED
Continuation of Ser. No. US 1992-966582, filed on 26 Oct 1992, ABANDONED
Continuation of Ser. No. US 1990-563535, filed on 6 Aug 1990, ABANDONED
DT Utility
FS APPLICATION
LN.CNT 638
INCL INCLM: 606/015.000
NCL NCLM: 606/015.000
IC [7]
ICM A61B018-24
IPCI A61B0018-24 [ICM,7]
IPCR A61B0017-22 [N,A]; A61B0017-22 [N,C]; A61B0018-00 [N,A]; A61B0018-00 [N,C]; A61B0018-20 [I,C]; A61B0018-22 [N,A]; A61B0018-24 [I,A]; A61B0019-00 [N,A]; A61B0019-00 [N,C]

L8 ANSWER 119 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2001:166902 USPATFULL
TI Methods and systems for treating ischemia

IN Lewis, Brian Douglas, Stanford, CA, United States
Bolduc, Lee R., Mountain View, CA, United States
PA Salient Interventional Systems, Inc., Cupertino, CA, United States (U.S. corporation)
PI US 6295990 B1 20011002
AI US 1999-311903 19990514 (9)
RLI Continuation-in-part of Ser. No. US 1999-243578, filed on 3 Feb 1999, now abandoned Continuation-in-part of Ser. No. US 1998-18214, filed on 3 Feb 1998, now patented, Pat. No. US 6044845
DT Utility
FS GRANTED
LN.CNT 1417
INCL INCLM: 128/898.000
INCLS: 604/004.000; 604/007.000; 604/008.000; 604/048.000; 604/049.000
NCL NCLM: 128/898.000
NCLS: 604/004.010; 604/007.000; 604/008.000; 604/048.000; 604/509.000
IC [7]
ICM A61B019-00
IPCI A61B0019-00 [ICM,7]
IPCR A61B0017-22 [N,A]; A61B0017-22 [N,C]; A61M0025-00 [I,A]; A61M0025-00 [I,C]; A61M0029-02 [I,A]; A61M0029-02 [I,C]
EXF 128/898; 604/4; 604/7; 604/8; 604/48; 604/49-53; 604/96; 604/102

L8 ANSWER 120 OF 180 USPATFULL on STN
Full Text | Citing References
AN 2001:161086 USPATFULL
TI Locking compression plate apparatus
IN Blatter, Duane D., Salt Lake City, UT, United States
Goodrich, Kenneth C., Salt Lake City, UT, United States
Barrus, Mike C., Bountiful, UT, United States
Burnett, Bruce M., Salt Lake City, UT, United States
PI US 2001023354 A1 20010920
AI US 2000-736937 A1 20001214 (9)
RLI Continuation-in-part of Ser. No. US 1999-460740, filed on 14 Dec 1999, PENDING Continuation-in-part of Ser. No. US 1999-293617, filed on 16 Apr 1999, GRANTED, Pat. No. US 6248117
DT Utility
FS APPLICATION
LN.CNT 3419
INCL INCLM: 606/153.000
NCL NCLM: 606/153.000
IC [7]
ICM A61B017-08
IPCI A61B0017-08 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C]; A61B0017-064 [I,A]; A61B0017-064 [I,C]; A61B0017-068 [N,A]; A61B0017-068 [I,C]; A61B0017-072 [I,A]; A61B0017-11 [N,A]; A61B0017-115 [I,A]; A61B0017-32 [N,A]; A61B0017-32 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]

L8 ANSWER 121 OF 180 USPATFULL on STN
Full Text | Citing References
AN 2001:139705 USPATFULL
TI Externally directed anastomosis systems and externally positioned anastomosis fenestra cutting apparatus
IN Blatter, Duane D., Salt Lake City, UT, United States
Goodrich, Kenneth C., Salt Lake City, UT, United States
Barrus, Mike C., Bountiful, UT, United States

Burnett, Bruce M., Salt Lake City, UT, United States
Tullius, Nemo J., JR., Tayorsville, UT, United States
PI US 2001016749 A1 20010823
US 6551334 B2 20030422
AI US 2000-736781 A1 20001214 (9)
RLI Continuation-in-part of Ser. No. US 1999-293366, filed on 16 Apr 1999, PENDING Continuation-in-part of Ser. No. US 1999-460740, filed on 14 Dec 1999, PENDING
DT Utility
FS APPLICATION
LN.CNT 3482
INCL INCLM: 606/153.000
NCL NCLM: 606/153.000
NCLS: 600/567.000; 606/170.000; 606/184.000
IC [7]
ICM A61B017-08
IPCI A61B0017-08 [ICM,7]
IPCI-2 A61B0017-32 [ICM,7]
IPCR A61B0017-03 [I,C]; A61B0017-064 [I,A]; A61B0017-064 [I,C]; A61B0017-11 [N,A]; A61B0017-115 [I,A]; A61B0017-32 [N,A]; A61B0017-32 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]

L8 ANSWER 122 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2001:134351 USPATFULL
TI Robotic arm DLUs for performing surgical tasks
IN Tovey, H. Jonathan, Monore, CT, United States
Ratcliff, Keith, Newtown, CT, United States
Toso, Kenneth E., Wilton, CT, United States
Hinchliffe, Peter W.J., New Haven, CT, United States
PA United States Surgical Corporation (U.S. corporation)
PI US 2001014801 A1 20010816
US 6827712 B2 20041207
AI US 2001-804531 A1 20010312 (9)
RLI Division of Ser. No. US 1998-99740, filed on 18 Jun 1998, GRANTED, Pat. No. US 6231565
PRAI US 1997-49923P 19970618 (60)
DT Utility
FS APPLICATION
LN.CNT 509
INCL INCLM: 606/001.000
INCLS: 606/010.000; 606/167.000
NCL NCLM: 606/001.000
NCLS: 600/102.000; 606/010.000; 606/167.000
IC [7]
ICM A61B017-00
ICS A61B017-32
IPCI A61B0017-00 [ICM,7]; A61B0017-32 [ICS,7]
IPCI-2 A61B0017-00 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-04 [I,A]; A61B0017-04 [I,C]; A61B0017-06 [N,A]; A61B0017-06 [N,C]; A61B0017-068 [N,C]; A61B0017-072 [N,A]; A61B0017-12 [N,C]; A61B0017-128 [N,A]; A61B0017-32 [N,A]; A61B0017-32 [N,C]; A61B0018-20 [N,A]; A61B0018-20 [N,C]; A61B0019-00 [I,A]; A61B0019-00 [I,C]

L8 ANSWER 123 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2001:118154 USPATFULL
TI Catheter apparatus for treating arterial occlusions
IN Selmon, Matthew R., Woodside, CA, United States
Vetter, James W., Portola Valley, CA, United States
Hinohara, Tomoaki, Portola Valley, CA, United States
Milo, Charles F., Union City, CA, United States
PA LuMend, Inc., Redwood City, CA, United States (U.S. corporation)
PI US 6266550 B1 20010724
AI US 2000-483173 20000113 (9)
RLI Division of Ser. No. US 1998-8033, filed on 16 Jan 1998, now patented, Pat. No. US 6157852, issued on 5 Dec 2000
DT Utility
FS GRANTED
LN.CNT 976
INCL INCLM: 600/407.000
INCLS: 600/471.000; 606/190.000
NCL NCLM: 600/407.000
NCLS: 600/471.000; 606/190.000
IC [7]
ICM A61B017-32
IPCI A61B0017-32 [ICM,7]
IPCR A61B0008-12 [I,A]; A61B0008-12 [I,C]; A61B0017-22 [I,A]; A61B0017-22 [I,C]; A61B0017-30 [N,A]; A61B0017-30 [N,C]; A61B0017-32 [N,A]; A61B0017-32 [N,C]; A61B0019-00 [N,A]; A61B0019-00 [N,C]; A61M0025-01 [N,A]; A61M0025-01 [N,C]
EXF 600/407; 600/137; 600/146; 600/104; 600/585; 600/439; 600/462; 600/464; 600/467; 600/471; 600/478; 606/159; 606/190

L8 ANSWER 124 OF 180 USPATFULL on STN
Full Text | Citing References

AN 2001:95526 USPATFULL
TI Locking compression plate anastomosis apparatus
IN Blatter, Duane D., Salt Lake City, UT, United States
Goodrich, Kenneth C., Salt Lake City, UT, United States
Barrus, Mike C., Bountiful, UT, United States
Burnett, Bruce M., Salt Lake City, UT, United States
PI US 2001004698 A1 20010621
AI US 2000-737200 A1 20001214 (9)
RLI Continuation-in-part of Ser. No. US 1999-460740, filed on 14 Dec 1999, PENDING Continuation-in-part of Ser. No. US 1999-293617, filed on 16 Apr 1999, PENDING
DT Utility
FS APPLICATION
LN.CNT 3554
INCL INCLM: 606/153.000
NCL NCLM: 606/153.000
IC [7]
ICM A61B017-11
IPCI A61B0017-11 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C]; A61B0017-064 [I,A]; A61B0017-064 [I,C]; A61B0017-068 [N,A]; A61B0017-068 [I,C]; A61B0017-072 [I,A]; A61B0017-11 [N,A]; A61B0017-115 [I,A]; A61B0017-32 [N,A]; A61B0017-32 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]

L8 ANSWER 125 OF 180 USPATFULL on STN
Full Text | Citing References

AN 2001:95525 USPATFULL

TI Intraluminally directed vascular anastomosis
IN Blatter, Duane D., Salt Lake City, UT, United States
Goodrich, Kenneth C., Salt Lake City, UT, United States
Barrus, Mike C., Bountiful, UT, United States
Burnett, Bruce M., Salt Lake City, UT, United States
PI US 2001004697 A1 20010621
US 6652542 B2 20031125
AI US 2000-737005 A1 20001214 (9)
RLI Continuation-in-part of Ser. No. US 1999-293617, filed on 16 Apr 1999, PENDING Continuation-in-part of Ser. No. US 1999-460740, filed on 14 Dec 1999, PENDING
DT Utility
FS APPLICATION
LN.CNT 3609
INCL INCLM: 606/153.000
NCL NCLM: 606/153.000
NCLS: 606/151.000
IC [7]
ICM A61B017-11
IPCI A61B0017-11 [ICM,7]
IPCI-2 A61B0017-08 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C]; A61B0017-064 [I,A]; A61B0017-064 [I,C]; A61B0017-068 [N,A]; A61B0017-068 [I,C]; A61B0017-072 [I,A]; A61B0017-11 [N,A]; A61B0017-115 [I,A]; A61B0017-32 [N,A]; A61B0017-32 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]

L8 ANSWER 126 OF 180 USPATFULL on STN
Full Text Citing References
AN 2001:92886 USPATFULL
TI Anastomosis apparatus for use in intraluminally directed vascular anastomosis
IN Blatter, Duane D., 4220 Brockbank Way, Salt Lake City, UT, United States 84124
PI US 6248117 B1 20010619
AI US 1999-293617 19990416 (9)
DT Utility
FS GRANTED
LN.CNT 3540
INCL INCLM: 606/153.000
INCLS: 606/158.000
NCL NCLM: 606/153.000
NCLS: 606/158.000
IC [7]
ICM A61B017-08
IPCI A61B0017-08 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C]; A61B0017-068 [N,A]; A61B0017-068 [I,C]; A61B0017-072 [I,A]; A61B0017-11 [N,A]; A61B0017-115 [I,A]; A61B0017-34 [N,A]; A61B0017-34 [N,C]
EXF 606/167; 606/150; 606/151; 606/152; 606/153; 606/217; 606/219; 606/157; 606/158; 227/180.1; 227/175.1

L8 ANSWER 127 OF 180 USPATFULL on STN
Full Text Citing References
AN 2001:88662 USPATFULL
TI Intravascular flow modifier and reinforcement device
IN Denardo, Andrew J., Carmel, IN, United States

PI US 2001000798 A1 20010503
US 6416541 B2 20020709
AI US 2000-747456 A1 20001222 (9)
RLI Division of Ser. No. US 1998-122243, filed on 24 Jul 1998, GRANTED, Pat. No. US 6165194
DT Utility
FS APPLICATION
LN.CNT 542
INCL INCLM: 606/191.000
NCL NCLM: 623/001.150; 606/191.000
NCLS: 623/901.000
IC [7]
ICM A61M029-00
IPCI A61M0029-00 [ICM,7]
IPCI-2 A61F0002-06 [ICM,7]
IPCR A61B0017-12 [N,A]; A61B0017-12 [N,C]; A61F0002-00 [N,A]; A61F0002-00 [N,C]; A61F0002-01 [N,A]; A61F0002-01 [N,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]

L8 ANSWER 128 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2001:81995 USPATFULL
TI Catheter apparatus for guided transvascular treatment of arterial occlusions
IN Vetter, James W., Portola Valley, CA, United States
Hinohara, Tomoaki, Portola Valley, CA, United States
Selmon, Matthew R., Woodside, CA, United States
Milo, Charles F., Union City, CA, United States
PA LuMend, Inc., Redwood City, CA, United States (U.S. corporation)
PI US 6241667 B1 20010605
AI US 1998-8198 19980115 (9)
RLI Continuation-in-part of Ser. No. US 1998-7434, filed on 15 Jan 1998, now patented, Pat. No. US 6081738
DT Utility
FS Granted
LN.CNT 1168
INCL INCLM: 600/407.000
INCLS: 606/189.000; 606/198.000
NCL NCLM: 600/407.000
NCLS: 606/189.000; 606/198.000
IC [7]
ICM A61B017-00
IPCI A61B0017-00 [ICM,7]
IPCR A61B0008-12 [I,A]; A61B0008-12 [I,C]; A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-22 [I,A]; A61B0017-22 [I,C]; A61B0017-30 [N,A]; A61B0017-30 [N,C]; A61B0017-32 [N,A]; A61B0017-32 [N,C]; A61B0019-00 [N,A]; A61B0019-00 [N,C]; A61M0025-01 [N,A]; A61M0025-01 [N,C]; A61M0029-02 [N,A]; A61M0029-02 [N,C]
EXF 600/427; 600/424; 600/433-435; 600/407; 606/151-156; 606/189; 606/198; 128/898; 604/96; 604/104; 604/164; 623/1; 623/2

L8 ANSWER 129 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2001:70803 USPATFULL
TI Robotic arm DLUs for performing surgical tasks
IN Tovey, H. Jonathan, Monore, CT, United States
Ratcliff, Keith, Newtown, CT, United States

Toso, Kenneth E., Wilton, CT, United States
Hinchliffe, Peter W. J., New Haven, CT, United States
PA United States Surgical Corporation, Norwalk, CT, United States (U.S. corporation)
PI US 6231565 B1 20010515
AI US 1998-99740 19980618 (9)
DT Utility
FS Granted
LN.CNT 500
INCL INCLM: 606/001.000
INCLS: 606/130.000; 600/102.000; 414/001.000
NCL NCLM: 606/001.000
NCLS: 414/001.000; 600/102.000; 606/130.000
IC [7]
ICM A61B017-00
IPCI A61B0017-00 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-04 [I,A]; A61B0017-04 [I,C]; A61B0017-06 [N,A]; A61B0017-06 [N,C]; A61B0017-068 [N,C]; A61B0017-072 [N,A]; A61B0017-12 [N,C]; A61B0017-128 [N,A]; A61B0017-32 [N,A]; A61B0017-32 [N,C]; A61B0018-20 [N,A]; A61B0018-20 [N,C]; A61B0019-00 [I,A]; A61B0019-00 [I,C]
EXF 606/1; 606/130; 128/897; 128/898; 414/1; 600/101; 600/102

L8 ANSWER 130 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2001:38494 USPATFULL
TI Hand-held stent crimping device
IN Jackson, Gregg A., Mountain View, CA, United States
PA Advanced Cardiovascular Systems, Inc., Santa Clara, CA, United States (U.S. corporation)
PI US 6202272 B1 20010320
AI US 1998-32472 19980226 (9)
DT Utility
FS Granted
LN.CNT 303
INCL INCLM: 029/235.000
INCLS: 029/234.000; 029/268.000; 029/270.000; 029/282.000; 029/283.500; 081/003.430; 081/064.000
NCL NCLM: 029/235.000
NCLS: 029/234.000; 029/268.000; 029/270.000; 029/282.000; 029/283.500; 081/003.430; 081/064.000
IC [7]
ICM B23P019-02
IPCI B23P0019-02 [ICM,7]
IPCR A61F0002-06 [I,A]; A61F0002-06 [I,C]
EXF 029/282; 029/283.5; 029/268; 029/234; 029/235; 029/270; 029/751; 029/516; 029/280; 294/31.2; 081/3.43; 081/64; 269/130-132; 606/139; 606/140; 606/194; 606/108

L8 ANSWER 131 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2001:1299 USPATFULL
TI Method for endoluminally excluding an aortic aneurysm
IN Marin, Michael L., New York, NY, United States
Marin, Ralph, New York, NY, United States
PA Endovascular Systems, Inc., Cross River, NY, United States (U.S. corporation)

PI US 6168610 B1 20010102
AI US 2000-504732 20000216 (9)
RLI Continuation of Ser. No. US 1997-838126, filed on 15 Apr 1997, now patented, Pat. No. US 6039749 Continuation of Ser. No. US 1995-537630, filed on 2 Oct 1995, now patented, Pat. No. US 5695517 Division of Ser. No. US 1994-324893, filed on 18 Oct 1994, now patented, Pat. No. US 5507769 Continuation-in-part of Ser. No. US 1994-196278, filed on 10 Feb 1994, now patented, Pat. No. US 5443477
DT Utility
FS Granted
LN.CNT 1316
INCL INCLM: 606/198.000
INCLS: 623/001.110; 623/001.230
NCL NCLM: 606/198.000
NCLS: 623/001.110; 623/001.230
IC [7]
ICM A61B017-00
ICS A61M029-00
IPCI A61B0017-00 [ICM,7]; A61M0029-00 [ICS,7]
IPCR A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61M0029-00 [I,A]; A61M0029-00 [I,C]
EXF 623/1.1; 623/1.11; 623/1.12; 623/1.13; 623/1.23; 623/1.35; 623/1.36; 623/12; 606/198

L8 ANSWER 132 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2000:173838 USPATFULL
TI Vascular stent for reduction of restenosis
IN Patterson, Greg R., Pleasanton, CA, United States
Kupiecki, David J., San Francisco, CA, United States
Mah, Kathy M., Mountain View, CA, United States
Williams, Ronald G., Menlo Park, CA, United States
Leary, James J., Sunnyvale, CA, United States
PA Prolifix Medical, Inc., Sunnyvale, CA, United States (U.S. corporation)
PI US 6165209 20001226
AI US 1998-209233 19981210 (9)
DT Utility
FS Granted
LN.CNT 1054
INCL INCLM: 623/001.100
INCLS: 606/159.000
NCL NCLM: 623/001.100
NCLS: 606/159.000
IC [7]
ICM A61F002-06
IPCI A61F0002-06 [ICM,7]
IPCR A61F0002-06 [I,A]; A61F0002-06 [I,C]
EXF 606/159; 606/198; 606/191; 623/1; 623/1.4; 623/1.15

L8 ANSWER 133 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2000:173823 USPATFULL
TI Intravascular flow modifier and reinforcement device
IN Denardo, Andrew J., Carmel, IN, United States
PA Micrus Corporation, Mountain View, CA, United States (U.S. corporation)
PI US 6165194 20001226
AI US 1998-122243 19980724 (9)
DT Utility

```
FS      Granted
LN.CNT 536
INCL    INCLM: 606/191.000
        INCLS: 623/001.000
NCL     NCLM:  606/191.000
IC      [7]
        ICM    A61M029-00
        IPCI   A61M0029-00 [ICM,7]
        IPCR   A61B0017-12 [N,A]; A61B0017-12 [N,C]; A61F0002-00 [N,A];
               A61F0002-00 [N,C]; A61F0002-01 [N,A]; A61F0002-01 [N,C];
               A61F0002-06 [I,A]; A61F0002-06 [I,C]
EXF     606/191; 606/192; 606/194; 606/195; 606/198; 623/1; 623/11; 623/12

L8   ANSWER 134 OF 180  USPATFULL on STN
```

Full Text | Cited References

```
AN      2000:165605  USPATFULL
TI      Catheter apparatus for treating arterial occlusions
IN      Selmon, Matthew R., Woodside, CA, United States
        Vetter, James W., Portola Valley, CA, United States
        Hinohara, Tomoaki, Portola Valley, CA, United States
        Milo, Charles F., Union City, CA, United States
PA      LuMend, Inc., Redwood City, CA, United States (U.S. corporation)
PI      US 6157852              20001205
AI      US 1998-8033            19980116 (9)
RLI     Continuation-in-part of Ser. No. US 1998-7434, filed on 15 Jan 1998
DT      Utility
FS      Granted
LN.CNT 968
INCL    INCLM: 600/407.000
        INCLS: 600/462.000; 128/898.000
NCL     NCLM:  600/407.000
        NCLS:  128/898.000; 600/462.000
IC      [7]
        ICM    A61B005-00
        ICS    A61B017-00
        IPCI   A61B0005-00 [ICM,7]; A61B0017-00 [ICS,7]
        IPCR   A61B0008-12 [I,A]; A61B0008-12 [I,C]; A61B0017-00 [N,A];
               A61B0017-00 [N,C]; A61B0017-22 [I,A]; A61B0017-22 [I,C];
               A61B0017-30 [N,A]; A61B0017-30 [N,C]; A61B0017-32 [N,A];
               A61B0017-32 [N,C]; A61B0019-00 [N,A]; A61B0019-00 [N,C];
               A61M0025-01 [N,A]; A61M0025-01 [N,C]; A61M0029-02 [N,A];
               A61M0029-02 [N,C]
EXF     600/101; 600/103; 600/104; 600/113; 600/114; 600/160; 600/182; 600/450;
        600/585; 600/462; 600/437; 600/439; 600/443; 600/461; 600/201; 600/227;
        600/407; 606/10; 606/11; 606/13-15; 128/898

L8   ANSWER 135 OF 180  USPATFULL on STN
```

Full Text | Cited References

```
AN      2000:141559  USPATFULL
TI      Aspiration method
IN      Muni, Ketan P., San Jose, CA, United States
        Zadno-Azizi, Gholam Reza, Newark, CA, United States
        Bagaoisan, Celso, Union City, CA, United States
PA      PercuSurge, Inc., Sunnyvale, CA, United States (U.S. corporation)
PI      US 6135991              20001024
AI      US 1998-49857           19980327 (9)
RLI     Continuation-in-part of Ser. No. US 1997-813807, filed on 6 Mar 1997,
        now abandoned
```

```
DT      Utility
FS      Granted
LN.CNT 1184
INCL    INCLM: 604/509.000
        INCLS: 604/510.000; 604/096.000; 604/022.000; 606/159.000
NCL     NCLM:  604/509.000
        NCLS:  604/022.000; 604/096.010; 604/510.000; 606/159.000
IC      [7]
        ICM    A61M031-00
        IPCI   A61M0031-00 [ICM,7]
        IPCR   A61B0017-22 [I,A]; A61B0017-22 [I,C]; A61B0018-20 [N,C];
               A61B0018-24 [N,A]; A61M0029-02 [I,A]; A61M0029-02 [I,C]
EXF     604/22; 604/28; 604/96; 604/101; 604/102; 604/104; 604/500; 604/506;
        604/510; 606/159; 606/198

L8   ANSWER 136 OF 180  USPATFULL on STN
```

Full Text | Citing References

```
AN      2000:127719  USPATFULL
TI      Closed chest coronary bypass
IN      Knudson, Mark B., Shoreview, MN, United States
        Giese, William L., Arlington, VA, United States
PA      Heartstent Corporation, St. Paul, MN, United States (U.S. corporation)
PI      US 6123682              20000926
AI      US 1998-54815           19980403 (9)
RLI     Continuation of Ser. No. US 1996-689773, filed on 13 Aug 1996, now
        patented, Pat. No. US 5755682
DT      Utility
FS      Granted
LN.CNT 1745
INCL    INCLM: 604/008.000
        INCLS: 623/001.100; 128/898.000
NCL     NCLM:  604/008.000
        NCLS:  128/898.000; 623/001.100
IC      [7]
        ICM    A61M005-00
        IPCI   A61M0005-00 [ICM,7]
        IPCR   A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C];
               A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C];
               A61B0017-34 [N,A]; A61B0017-34 [N,C]; A61B0018-20 [N,C];
               A61B0018-24 [N,A]; A61F0002-02 [N,A]; A61F0002-02 [N,C];
               A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61F0002-24 [I,A];
               A61F0002-24 [I,C]
EXF     623/1; 623/12; 604/8; 128/898

L8   ANSWER 137 OF 180  USPATFULL on STN
```

Full Text | Citing References

```
AN      2000:120773  USPATFULL
TI      Energy delivery catheter and method for the use thereof
IN      Gregory, Kenton W., 3737 SW. Council Crest Dr., Portland, OR, United
        States  97201
PA      Gregory, Kenton W., Portland, OR, United States (U.S. individual)
        Providence Health System, Seattle, WA, United States (U.S. corporation)
PI      US 6117128              20000912
AI      US 1998-70895           19980430 (9)
PRAI    US 1997-88363P      19970430 (60)
DT      Utility
FS      Granted
LN.CNT 836
```

INCL INCLM: 606/007.000
INCLS: 606/015.000; 607/089.000
NCL NCLM: 606/007.000
NCLS: 606/015.000; 607/089.000
IC [7]
ICM A61B018-18
IPCI A61B0018-18 [ICM,7]
IPCR A61B0017-22 [N,A]; A61B0017-22 [N,C]; A61B0018-20 [N,A]; A61B0018-20 [I,C]; A61B0018-24 [I,A]
EXF 606/2; 606/7; 606/13; 606/14-16; 607/88; 607/89; 607/92; 607/93

L8 ANSWER 138 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2000:94466 USPATFULL
TI Coronary bypass implant
IN Knudson, Mark B., Shoreview, MN, United States
Giese, William L., Arlington, VA, United States
PA Heartstent, LLC, Minneapolis, MN, United States (U.S. corporation)
PI US 6093166 20000725
AI US 1998-55488 19980403 (9)
RLI Continuation of Ser. No. US 1996-689773, filed on 13 Aug 1996, now patented, Pat. No. US 5755682
DT Utility
FS Granted
LN.CNT 1756
INCL INCLM: 604/008.000
INCLS: 623/001.100; 623/001.120; 128/898.000
NCL NCLM: 604/008.000
NCLS: 128/898.000; 623/001.100; 623/001.120
IC [7]
ICM A61F002-06
IPCI A61F0002-06 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C]; A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]; A61B0018-20 [N,C]; A61B0018-24 [N,A]; A61F0002-02 [N,A]; A61F0002-02 [N,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61F0002-24 [I,A]; A61F0002-24 [I,C]
EXF 604/8; 604/7; 604/9; 623/1; 623/12; 128/898; 600/16

L8 ANSWER 139 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2000:90392 USPATFULL
TI Method of using an in vivo mechanical energy source
IN Hastings, Roger, Maple Grove, MN, United States
Larson, Kenneth, Maple Grove, MN, United States
Berman, Michael, Golden Valley, MN, United States
Lafontaine, Daniel M, Plymouth, MN, United States
PA Scimed Life Systems, Inc., Maple Grove, MN, United States (U.S. corporation)
PI US 6089235 20000718
AI US 1999-258361 19990226 (9)
RLI Division of Ser. No. US 1998-28859, filed on 24 Feb 1998, now abandoned which is a division of Ser. No. US 1997-795602, filed on 5 Feb 1997, now patented, Pat. No. US 5823199 which is a division of Ser. No. US 1994-343045, filed on 21 Nov 1994, now patented, Pat. No. US 5628719 which is a continuation-in-part of Ser. No. US 1992-981612, filed on 25 Nov 1992, now abandoned

```
DT      Utility
FS      Granted
LN.CNT 1239
INCL    INCLM: 128/898.000
NCL     NCLM:  128/898.000
IC      [7]
        ICM    A61B017-00
        IPCI   A61B0017-00 [ICM,7]
        IPCR   A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61M0001-10 [I,A];
               A61M0001-10 [I,C]; A61M0025-10 [I,A]; A61M0025-10 [I,C]
EXF     606/127; 606/128; 606/159; 606/169; 606/171; 606/177; 128/898
 L8   ANSWER 140 OF 180  USPATFULL on STN
```

Full Text | Cited References

```
AN      2000:83573  USPATFULL
TI      Vibrating stent for opening calcified lesions
IN      Cox, Daniel L., Palo Alto, CA, United States
PA      Advanced Cardivascular Systems, Inc., Santa Clara, CA, United States
        (U.S. corporation)
PI      US 6083232              20000704
AI      US 1996-720098          19960927 (8)
DT      Utility
FS      Granted
LN.CNT 528
INCL    INCLM: 606/128.000
        INCLS: 601/002.000
NCL     NCLM:  606/128.000
        NCLS:  601/002.000
IC      [7]
        ICM    A61B017-22
        IPCI   A61B0017-22 [ICM,7]
        IPCR   A61B0017-22 [I,A]; A61B0017-22 [I,C]; A61F0002-06 [I,A];
               A61F0002-06 [I,C]; A61M0029-02 [N,A]; A61M0029-02 [N,C]
EXF     601/2; 601/3; 601/4; 606/128


L8   ANSWER 141 OF 180  USPATFULL on STN
```

Full Text | Cited References

```
AN      2000:81742  USPATFULL
TI      Method and apparatus for the guided bypass of coronary occlusions
IN      Hinohara, Tomoaki, Portola Valley, CA, United States
        Selmon, Matthew R., Woodside, CA, United States
        Vetter, James W., Portola Valley, CA, United States
        Milo, Charles F., Union City, CA, United States
PA      LuMend, Inc., Redwood City, CA, United States (U.S. corporation)
PI      US 6081738              20000627
AI      US 1998-7434            19980115 (9)
DT      Utility
FS      Granted
LN.CNT 1029
INCL    INCLM: 600/407.000
        INCLS: 600/464.000; 600/466.000; 606/167.000; 606/185.000
NCL     NCLM:  600/407.000
        NCLS:  600/464.000; 600/466.000; 606/167.000; 606/185.000
IC      [7]
        ICM    A61B005-05
        IPCI   A61B0005-05 [ICM,7]
        IPCR   A61B0008-12 [I,A]; A61B0008-12 [I,C]; A61B0017-00 [N,A];
               A61B0017-00 [N,C]; A61B0017-22 [I,A]; A61B0017-22 [I,C];
```

A61B0017-30 [N,A]; A61B0017-30 [N,C]; A61B0017-32 [N,A];
A61B0017-32 [N,C]; A61B0019-00 [N,A]; A61B0019-00 [N,C];
A61M0025-01 [N,A]; A61M0025-01 [N,C]; A61M0029-02 [N,A];
A61M0029-02 [N,C]

EXF 600/427; 600/437; 600/462; 600/463; 600/464; 600/466; 600/467; 600/471; 600/407; 600/473; 600/476; 606/151; 606/152; 606/153; 606/154; 606/155; 606/156; 606/167; 606/185; 128/898; 623/1; 623/2

L8 ANSWER 142 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2000:57048 USPATFULL
TI Mechanical apparatus and method for dilating and irradiating a site of treatment
IN Segal, Jerome, 6132 Western Ave., Chevy Chase, MD, United States 20815
PI US 6059752 20000509
AI US 1997-969220 19971113 (8)
RLI Continuation-in-part of Ser. No. US 1996-647696, filed on 15 May 1996, now patented, Pat. No. US 5755708 which is a continuation-in-part of Ser. No. US 1995-569579, filed on 8 Dec 1995, now patented, Pat. No. US 5695469 which is a continuation-in-part of Ser. No. US 1994-353558, filed on 9 Dec 1994, now patented, Pat. No. US 5527282
DT Utility
FS Granted
LN.CNT 1276
INCL INCLM: 604/107.000
INCLS: 604/104.000; 606/194.000
NCL NCLM: 604/107.000
NCLS: 604/104.000; 606/194.000
IC [7]
ICM A61M029-00
IPCI A61M0029-00 [ICM,7]
IPCR A61F0002-00 [N,A]; A61F0002-00 [N,C]; A61F0002-06 [I,A];
A61F0002-06 [I,C]; A61M0025-10 [I,A]; A61M0025-10 [I,C];
A61M0029-00 [I,A]; A61M0029-00 [I,C]; A61M0029-02 [I,A];
A61M0029-02 [I,C]
EXF 604/104; 604/202; 604/53; 604/107; 604/106; 604/19; 606/194; 600/1; 600/3

L8 ANSWER 143 OF 180 USPATFULL on STN

Full Text | Citing References

AN 2000:33996 USPATFULL
TI Method and apparatus for deploying non-circular stents and graftstent complexes
IN Marin, Michael L., New York, NY, United States
Marin, Ralph, New York, NY, United States
PA Endovascular Systems, Inc., Cross River, NY, United States (U.S. corporation)
PI US 6039749 20000321
AI US 1997-838126 19970415 (8)
RLI Continuation of Ser. No. US 1995-537630, filed on 2 Oct 1995, now patented, Pat. No. US 5695517 76 Ser. No. US 1994-324893, filed on 18 Oct 1994, now patented, Pat. No. US 5507769 And a continuation-in-part of Ser. No. US 1994-196278, filed on 10 Feb 1994, now patented, Pat. No. US 5443477
DT Utility
FS Granted
LN.CNT 1342
INCL INCLM: 606/198.000

```
       INCLS: 623/001.000; 623/012.000; 606/194.000; 604/096.000
NCL    NCLM:  623/001.110
       NCLS:  604/103.070; 606/194.000
IC     [7]
       ICM    A61M029-00
       IPCI   A61M0029-00 [ICM,7]
       IPCR   A61F0002-06 [I,A]; A61F0002-06 [I,C]
EXF    606/1; 606/108; 606/191; 606/194; 606/195; 606/198; 606/200; 623/1;
       623/12; 604/96-101

L8   ANSWER 144 OF 180  USPATFULL on STN
```

Full Text | Citing References

```
AN     2000:30782  USPATFULL
TI     Cutting stent with flexible tissue extractor
IN     Sciver, Jason Van, Mountain View, CA, United States
PA     Advanced Cardiovascular Systems, Inc., Santa Clara, CA, United States
       (U.S. corporation)
PI     US 6036708              20000314
AI     US 1998-134540          19980813 (9)
DT     Utility
FS     Granted
LN.CNT 486
INCL   INCLM: 606/159.000
       INCLS: 606/170.000; 606/180.000
NCL    NCLM:  606/159.000
       NCLS:  606/170.000; 606/180.000
IC     [7]
       ICM    A61B017-22
       IPCI   A61B0017-22 [ICM,7]
       IPCR   A61B0017-22 [I,A]; A61B0017-22 [I,C]; A61F0002-06 [N,A];
              A61F0002-06 [N,C]
EXF    606/159; 606/170; 606/180; 606/172; 606/192; 606/193; 606/195; 604/22;
       604/29; 604/53; 604/96; 623/1; 623/2; 623/12

L8   ANSWER 145 OF 180  USPATFULL on STN
```

Full Text | Citing References

```
AN     1999:169939  USPATFULL
TI     Catheter apparatus having an improved shape-memory alloy cuff and
       inflatable on-demand balloon for creating a bypass graft in-vivo
IN     Kim, Ducksoo, Dover, MA, United States
PA     Beth Israel Deaconess Medical Center, Boston, MA, United States (U.S.
       corporation)
PI     US 6007544              19991228
AI     US 1998-60958           19980416 (9)
RLI    Continuation-in-part of Ser. No. US 1996-702068, filed on 23 Aug 1996,
       now patented, Pat. No. US 5797920 which is a continuation-in-part of
       Ser. No. US 1996-664165, filed on 14 Jun 1996, now patented, Pat. No. US
       5676670, issued on 14 Oct 1997
DT     Utility
FS     Granted
LN.CNT 2737
INCL   INCLM: 606/108.000
       INCLS: 606/185.000; 606/195.000
NCL    NCLM:  606/108.000
       NCLS:  606/185.000; 606/195.000
IC     [6]
       ICM    A61F011-00
       IPCI   A61F0011-00 [ICM,6]
```

IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C]; A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C]; A61B0017-22 [N,A]; A61B0017-22 [N,C]; A61B0017-32 [I,A]; A61B0017-32 [I,C]; A61B0017-34 [I,A]; A61B0017-34 [I,C]; A61F0002-00 [N,A]; A61F0002-00 [N,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61M0025-00 [I,A]; A61M0025-00 [I,C]
EXF 606/108; 606/195; 606/198; 606/191; 606/192; 606/185; 606/194; 604/93; 604/96; 604/164; 623/1; 623/11; 623/12

L8 ANSWER 146 OF 180 USPATFULL on STN

Full Text | Citing References

AN 1999:166311 USPATFULL
TI Catheters for imaging, sensing electrical potentials, and ablating tissue
IN Crowley, Robert J., Wayland, MA, United States
Abele, John E., Concord, MA, United States
Lennox, Charles D., Hudson, NH, United States
Ropiak, Susan M., Hanscom Air Force Base, MA, United States
PA Boston Scientific Corporation, Watertown, MA, United States (U.S. corporation)
PI US 6004269 19991221
AI US 1995-473137 19950607 (8)
RLI Continuation-in-part of Ser. No. US 1993-86523, filed on 1 Jul 1993, now abandoned Ser. No. Ser. No. US 1993-86543, filed on 1 Jul 1993, now abandoned And Ser. No. US 1993-86740, filed on 1 Jul 1993, now abandoned
DT Utility
FS Granted
LN.CNT 2781
INCL INCLM: 600/439.000
INCLS: 600/374.000; 606/027.000; 607/122.000
NCL NCLM: 600/439.000
NCLS: 600/374.000; 606/027.000; 607/122.000
IC [6]
ICM A61B008-00
ICS A61B005-04; A61N001-06
IPCI A61B0008-00 [ICM,6]; A61B0005-04 [ICS,6]; A61N0001-06 [ICS,6]
IPCR A61B0008-12 [I,A]; A61B0008-12 [I,C]; A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-22 [I,A]; A61B0017-22 [I,C]; A61B0018-14 [I,A]; A61B0018-14 [I,C]; A61B0019-00 [N,A]; A61B0019-00 [N,C]
EXF 128/642; 128/660.03; 128/662.06; 606/45; 606/49-50; 606/27; 604/22; 604/96-103; 607/122; 600/374; 600/439; 600/443; 600/462-463

L8 ANSWER 147 OF 180 USPATFULL on STN

Full Text | Citing References

AN 1999:136278 USPATFULL
TI Phototherapy device and method
IN Reiser, Christopher, Colorado Springs, CO, United States
PA Spectranetics Corporation, Colorado Springs, CO, United States (U.S. corporation)
PI US 5976124 19991102
AI US 1998-2869 19980105 (9)
DT Utility
FS Granted
LN.CNT 492
INCL INCLM: 606/014.000
INCLS: 606/015.000
NCL NCLM: 606/014.000

NCLS: 606/015.000
IC [6]
ICM A61B017-36
IPCI A61B0017-36 [ICM,6]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0018-20 [N,A]; A61B0018-20 [I,C]; A61B0018-24 [I,A]
EXF 606/1; 606/13; 606/14; 606/15; 606/16; 606/17; 606/7; 606/8; 606/9; 606/10; 606/11; 606/12

L8 ANSWER 148 OF 180 USPATFULL on STN

Full Text | Citing References

AN 1999:116524 USPATFULL
TI Vascular acoustic emission analysis in a balloon **angioplasty** system
IN Mockros, Lyle F., Glenview, IL, United States
Fildes, John M., Batavia, IL, United States
Chandran, Krishnan B., Iowa City, IA, United States
Vonesh, Michael J., Flagstaff, AZ, United States
McPherson, David D., Chicago, IL, United States
Nagaraj, Ashwin, Evanston, IL, United States
Davidson, Charles, Winnetka, IL, United States
PA Northwestern University Medical School, Chicago, IL, United States (U.S. corporation)
PI US 5957950 19990928
AI US 1997-874880 19970613 (8)
RLI Continuation of Ser. No. US 1997-786483, filed on 21 Jan 1997
DT Utility
FS Granted
LN.CNT 1067
INCL INCLM: 606/194.000
INCLS: 600/586.000
NCL NCLM: 606/194.000
NCLS: 600/586.000
IC [6]
ICM A61M025-10
IPCI A61M0025-10 [ICM,6]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61M0029-02 [I,A]; A61M0029-02 [I,C]
EXF 606/194; 606/108; 604/96; 600/470; 600/586

L8 ANSWER 149 OF 180 USPATFULL on STN

Full Text | Citing References

AN 1999:101411 USPATFULL
TI Closed chest coronary bypass
IN Knudson, Mark B., Shoreview, MN, United States
Giese, William L., Arlington, VA, United States
PA Heartstent Corporation, St. Paul, MN, United States (U.S. corporation)
PI US 5944019 19990831
AI US 1997-882397 19970625 (8)
RLI Continuation-in-part of Ser. No. US 1996-689773, filed on 13 Aug 1996, now patented, Pat. No. US 5755682
DT Utility
FS Granted
LN.CNT 1816
INCL INCLM: 128/898.000
INCLS: 623/001.000; 623/002.000
NCL NCLM: 128/898.000
NCLS: 623/903.000
IC [6]

```
        ICM    A61B017-00
        ICS    A61F002-24
        IPCI   A61B0017-00 [ICM,6]; A61F0002-24 [ICS,6]
        IPCR   A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C];
               A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C];
               A61B0017-34 [N,A]; A61B0017-34 [N,C]; A61B0018-20 [N,C];
               A61B0018-24 [N,A]; A61F0002-02 [N,A]; A61F0002-02 [N,C];
               A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61F0002-24 [I,A];
               A61F0002-24 [I,C]
EXF     623/1; 623/12; 606/192; 606/194; 606/195; 606/198; 128/898

L8   ANSWER 150 OF 180  USPATFULL on STN
```

Full Text | Citing References

```
AN      1998:161686  USPATFULL
TI      In-vivo modification of the mechanical properties of surgical devices
IN      Muni, Ketan P., San Jose, CA, United States
PA      Advanced Cardiovascular Systems, Inc., Santa Clara, CA, United States
        (U.S. corporation)
PI      US 5853408              19981229
AI      US 1995-457325          19950601 (8)
RLI     Continuation-in-part of Ser. No. US 1994-242410, filed on 13 May 1994,
        now abandoned which is a continuation of Ser. No. US 1992-932607, filed
        on 20 Aug 1992, now abandoned
DT      Utility
FS      Granted
LN.CNT 597
INCL    INCLM: 606/027.000
        INCLS: 604/096.000; 604/200.000; 606/192.000
NCL     NCLM:  606/027.000
        NCLS:  604/523.000; 606/192.000; 607/096.000
IC      [6]
        ICM    A61N005-00
        IPCI   A61N0005-00 [ICM,6]
        IPCR   A61M0025-00 [I,A]; A61M0025-00 [I,C]
EXF     606/27; 606/28; 606/192; 606/194; 604/94; 604/280-281

L8   ANSWER 151 OF 180  USPATFULL on STN
```

Full Text | Citing References

```
AN      1998:126839  USPATFULL
TI      In vivo mechanical energy source
IN      Hastings, Roger, Maple Grove, MN, United States
        Larson, Kenneth, Maple Grove, MN, United States
        Berman, Michael, Golden Valley, MN, United States
        Lafontaine, Daniel M., Plymouth, MN, United States
PA      SciMed Life Systems, Inc., Maple Grove, MN, United States (U.S.
        corporation)
PI      US 5823199              19981020
AI      US 1997-795602          19970205 (8)
RLI     Division of Ser. No. US 1994-343045, filed on 21 Nov 1994, now patented,
        Pat. No. US 5628719 which is a continuation-in-part of Ser. No. US
        1992-981612, filed on 25 Nov 1992, now abandoned
DT      Utility
FS      Granted
LN.CNT 1239
INCL    INCLM: 128/899.000
NCL     NCLM:  128/899.000
IC      [6]
        ICM    A61B019-00
```

IPCI A61B0019-00 [ICM,6]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61M0001-10 [I,A]; A61M0001-10 [I,C]; A61M0025-10 [I,A]; A61M0025-10 [I,C]
EXF 128/660.09; 128/733; 128/769; 128/897; 128/662.06; 128/631; 128/663.01; 128/637; 128/899; 128/772; 606/167; 606/169; 606/170; 606/171; 606/129; 606/191; 606/177; 606/194; 600/141; 600/142; 600/145; 600/146; 604/22; 604/33; 604/107; 604/152

L8 ANSWER 152 OF 180 USPATFULL on STN

Full Text | Citing References

AN 1998:121910 USPATFULL
TI Method for contemporaneous application OF laser energy and localized pharmacologic therapy
IN Gregory, Kenton W., Portland, OR, United States
PA Latis, Inc., West Conshohocken, PA, United States (U.S. corporation)
PI US 5817144 19981006
AI US 1996-728618 19961010 (8)
RLI Continuation-in-part of Ser. No. US 1994-328857, filed on 25 Oct 1994, now patented, Pat. No. US 5571151 And Ser. No. US 1996-644533, filed on 10 May 1996
DT Utility
FS Granted
LN.CNT 532
INCL INCLM: 607/089.000
INCLS: 606/007.000; 606/015.000; 604/020.000
NCL NCLM: 607/089.000
NCLS: 604/020.000; 606/007.000; 606/015.000
IC [6]
ICM A61B005-00
IPCI A61B0005-00 [ICM,6]
IPCR A61B0017-22 [N,A]; A61B0017-22 [N,C]; A61B0018-00 [N,A]; A61B0018-00 [N,C]; A61B0018-20 [I,C]; A61B0018-24 [I,A]; A61B0019-00 [N,A]; A61B0019-00 [N,C]
EXF 606/7; 606/8; 606/10; 606/13-17; 607/88-96; 607/20

L8 ANSWER 153 OF 180 USPATFULL on STN

Full Text | Citing References

AN 1998:101221 USPATFULL
TI Catheter apparatus and method using a shape-memory alloy cuff for creating a bypass graft in-vivo
IN Kim, Ducksoo, Dover, MA, United States
PA Beth Israel Deaconess Medical Center, Boston, MA, United States (U.S. corporation)
PI US 5797920 19980825
AI US 1996-702068 19960823 (8)
RLI Continuation-in-part of Ser. No. US 1996-664165, filed on 14 Jun 1996, now patented, Pat. No. US 5676670
DT Utility
FS Granted
LN.CNT 2311
INCL INCLM: 606/108.000
INCLS: 606/185.000; 606/195.000; 604/164.000; 623/012.000
NCL NCLM: 606/108.000
NCLS: 606/185.000; 606/195.000
IC [6]
ICM A61F011-00
IPCI A61F0011-00 [ICM,6]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C];

```
                A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C];
                A61B0017-22 [N,A]; A61B0017-22 [N,C]; A61B0017-32 [I,A];
                A61B0017-32 [I,C]; A61B0017-34 [I,A]; A61B0017-34 [I,C];
                A61F0002-00 [N,A]; A61F0002-00 [N,C]; A61F0002-06 [I,A];
                A61F0002-06 [I,C]; A61M0025-00 [I,A]; A61M0025-00 [I,C]
EXF     606/108; 606/159; 606/184; 606/185; 606/192; 606/198; 606/195; 604/164;
        604/161; 623/1; 623/12

L8   ANSWER 154 OF 180  USPATFULL on STN
```

Full Text | CBib | References

```
AN      1998:94957  USPATFULL
TI      Wound closure hemostasis device
IN      Breen, Richard C., Doncaster East, Australia
        Lazarus, Peter H., Templestowe, Australia
        Edwards, Stuart D., 1681 Austin Ave., Los Altos, CA, United States
        94024
        Gough, Edward J., San Carlos, CA, United States
PA      Edwards, Stuart D., Los Altos, CA, United States (U.S. individual)
PI      US 5792173              19980811
AI      US 1995-500381          19950710 (8)
DT      Utility
FS      Granted
LN.CNT 569
INCL    INCLM: 606/201.000
        INCLS: 606/001.000
NCL     NCLM:  606/201.000
        NCLS:  606/001.000
IC      [6]
        ICM    A61B017-00
        IPCI   A61B0017-00 [ICM,6]
        IPCR   A61B0017-12 [I,C]; A61B0017-132 [N,A]; A61B0017-135 [I,A]
EXF     606/190-200; 604/95-104; 666/201-204.55; 128/DIG.20

L8   ANSWER 155 OF 180  USPATFULL on STN
```

Full Text | CBib | References

```
AN      1998:57118  USPATFULL
TI      Method and apparatus for performing coronary artery bypass surgery
IN      Knudson, Mark B., Shoreview, MN, United States
        Giese, William L., Arlington, VA, United States
PA      HeartStent Corporation, St. Paul, MN, United States (U.S. corporation)
PI      US 5755682              19980526
AI      US 1996-689773          19960813 (8)
DT      Utility
FS      Granted
LN.CNT 1742
INCL    INCLM: 604/008.000
        INCLS: 623/001.000; 623/012.000
NCL     NCLM:  604/008.000
IC      [6]
        ICM    A61F002-04
        ICS    A61F002-06
        IPCI   A61F0002-04 [ICM,6]; A61F0002-06 [ICS,6]
        IPCR   A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C];
               A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C];
               A61B0017-34 [N,A]; A61B0017-34 [N,C]; A61B0018-20 [N,C];
               A61B0018-24 [N,A]; A61F0002-02 [N,A]; A61F0002-02 [N,C];
               A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61F0002-24 [I,A];
               A61F0002-24 [I,C]
```

EXF 604/7; 604/8; 604/9; 623/1; 623/12; 128/898; 600/16

L8 ANSWER 156 OF 180 USPATFULL on STN

Full Text | Citing References

AN 1998:21751 USPATFULL
TI Pressure assisted ultrasonic balloon catheter and method of using same
IN Kusleika, Richard S., Eden Prairie, MN, United States
PA Schneider (USA) Inc., Plymouth, MN, United States (U.S. corporation)
PI US 5722979 19980303
AI US 1997-826889 19970408 (8)
DT Utility
FS Granted
LN.CNT 427
INCL INCLM: 606/108.000
INCLS: 606/169.000; 606/194.000; 604/022.000
NCL NCLM: 623/001.110
NCLS: 604/022.000; 606/169.000; 606/194.000
IC [6]
ICM A61M025-10
IPCI A61M0025-10 [ICM,6]
IPCR A61B0017-22 [I,A]; A61B0017-22 [I,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61M0025-10 [I,A]; A61M0025-10 [I,C]; A61M0029-02 [I,A]; A61M0029-02 [I,C]
EXF 604/22; 606/108; 606/159; 606/169; 606/194

L8 ANSWER 157 OF 180 USPATFULL on STN

Full Text | Citing References

AN 97:114693 USPATFULL
TI Method and apparatus for forming an endoluminal bifurcated graft
IN Marin, Michael L., New York, NY, United States
Marin, Ralph, New York, NY, United States
PA Endovascular Systems, Inc., Cross River, NY, United States (U.S. corporation)
PI US 5695517 19971209
AI US 1995-537630 19951002 (8)
RLI Division of Ser. No. US 1994-324893, filed on 18 Oct 1994, now patented, Pat. No. US 5507769 which is a continuation-in-part of Ser. No. US 1994-196278, filed on 10 Feb 1994, now patented, Pat. No. US 5443477
DT Utility
FS Granted
LN.CNT 1288
INCL INCLM: 606/198.000
INCLS: 623/001.000; 623/012.000
NCL NCLM: 623/001.130
NCLS: 606/198.000; 623/001.200
IC [6]
ICM A61B017-00
ICS A61F002-06
IPCI A61B0017-00 [ICM,6]; A61F0002-06 [ICS,6]
IPCR A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61M0029-00 [I,A]; A61M0029-00 [I,C]
EXF 606/108; 606/191; 606/192; 606/194; 606/195; 606/198; 623/1; 623/12; 128/898; 128/899

L8 ANSWER 158 OF 180 USPATFULL on STN

Full Text | Citing References

AN 97:40211 USPATFULL

TI In vivo mechanical energy source and perfusion pump
IN Hastings, Roger, Maple Grove, MN, United States
Larson, Kenneth, Maple Grove, MN, United States
Berman, Michael, Golden Valley, MN, United States
Lafontaine, Daniel M., Plymouth, MN, United States
PA Scimed Life Systems, Inc., Maple Grove, MN, United States (U.S. corporation)
PI US 5628719 19970513
AI US 1994-343045 19941121 (8)
RLI Continuation-in-part of Ser. No. US 1992-981612, filed on 25 Nov 1992, now abandoned
DT Utility
FS Granted
LN.CNT 1313
INCL INCLM: 600/016.000
NCL NCLM: 600/016.000
IC [6]
ICM A61M001-12
IPCI A61M0001-12 [ICM,6]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61M0001-10 [I,A]; A61M0001-10 [I,C]; A61M0025-10 [I,A]; A61M0025-10 [I,C]
EXF 600/16; 604/65; 604/67; 604/152; 604/891.1

L8 ANSWER 159 OF 180 USPATFULL on STN
Full Text | Citing References
AN 96:103506 USPATFULL
TI Fluid core laser angioscope
IN Gregory, Kenton W., 9155 SW. Barnes Rd., Suite 204, Portland, OR, United States 97225
PI US 5573531 19961112
AI US 1994-262926 19940620 (8)
DT Utility
FS Granted
LN.CNT 591
INCL INCLM: 606/014.000
INCLS: 606/015.000; 606/016.000; 606/007.000; 600/108.000; 385/125.000
NCL NCLM: 606/014.000
NCLS: 385/125.000; 600/108.000; 606/007.000; 606/015.000; 606/016.000
IC [6]
ICM A61B017-36
IPCI A61B0017-36 [ICM,6]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-22 [N,A]; A61B0017-22 [N,C]; A61B0018-20 [N,A]; A61B0018-20 [I,C]; A61B0018-24 [I,A]; A61B0019-00 [N,A]; A61B0019-00 [N,C]; A61M0003-00 [N,C]; A61M0003-02 [N,A]
EXF 606/7; 606/13; 606/14-17; 128/4; 128/6; 607/88; 607/89; 600/108; 385/125

L8 ANSWER 160 OF 180 USPATFULL on STN
Full Text | Citing References
AN 96:100930 USPATFULL
TI Method for contemporaneous application of laser energy and localized pharmacologic therapy
IN Gregory, Kenton W., 9205 SW. Barnes Rd., Portland, OR, United States 97225
PI US 5571151 19961105
AI US 1994-328857 19941025 (8)
DT Utility
FS Granted

```
LN.CNT 513
INCL   INCLM: 607/088.000
       INCLS: 606/015.000; 606/007.000; 604/020.000
NCL    NCLM:  607/088.000
       NCLS:  604/020.000; 606/007.000; 606/015.000
IC     [6]
       ICM    A61B017-32
       IPCI   A61B0017-32 [ICM,6]
       IPCR   A61B0017-22 [N,A]; A61B0017-22 [N,C]; A61B0018-20 [I,C];
              A61B0018-24 [I,A]
EXF    607/88-90; 604/20; 604/21; 606/7; 606/8; 606/10; 606/13-16; 606/17

L8   ANSWER 161 OF 180  USPATFULL on STN
```

Full Text | Citing References

```
AN     96:31323  USPATFULL
TI     Method and apparatus for forming an endoluminal bifurcated graft
IN     Marin, Michael L., New York, NY, United States
       Marin, Ralph, New York, NY, United States
PA     Stentco, Inc., Cross River, NY, United States (U.S. corporation)
PI     US 5507769              19960416
AI     US 1994-324893          19941018 (8)
DT     Utility
FS     Granted
LN.CNT 1489
INCL   INCLM: 606/198.000
       INCLS: 606/195.000; 623/001.000; 623/012.000; 604/104.000
NCL    NCLM:  606/198.000
       NCLS:  604/104.000; 606/195.000
IC     [6]
       ICM    A61B017-00
       IPCI   A61B0017-00 [ICM,6]
       IPCR   A61F0002-06 [I,A]; A61F0002-06 [I,C]
EXF    606/108; 606/152; 606/153; 606/191; 606/194; 606/195; 606/198; 606/200;
       623/1; 623/12; 604/53; 604/104-107

L8   ANSWER 162 OF 180  USPATFULL on STN
```

Full Text | Citing References

```
AN     96:6867  USPATFULL
TI     Method for attaching a marker to a medical instrument
IN     Kleshinski, Stephen J., 599 Country Way, Scituate, MA, United States
       02066
PI     US 5485667              19960123
AI     US 1994-205106          19940303 (8)
DT     Utility
FS     Granted
LN.CNT 680
INCL   INCLM: 029/447.000
       INCLS: 029/469.500; 029/517.000; 029/523.000
NCL    NCLM:  029/447.000
       NCLS:  029/469.500; 029/517.000; 029/523.000
IC     [6]
       ICM    B23P011-02
       IPCI   B23P0011-02 [ICM,6]
       IPCR   A61B0019-00 [I,A]; A61B0019-00 [I,C]; A61F0002-00 [N,A];
              A61F0002-00 [N,C]; A61M0025-00 [I,A]; A61M0025-00 [I,C];
              A61M0025-01 [N,A]; A61M0025-01 [N,C]; B23P0011-02 [I,A];
              B23P0011-02 [I,C]
EXF    029/447; 029/469.5; 029/507; 029/508; 029/517; 029/523; 285/381;
```

403/273; 604/281

L8 ANSWER 163 OF 180 USPATFULL on STN

Full Text | Cited References

AN 93:5029 USPATFULL
TI Apparatus and method for **angioplasty** and for preventing re-stenosis
IN Woods, W. T., R.R. 1-Box 13, Chatham, IL, United States 62629
PI US 5180366 19930119
AI US 1990-597483 19901010 (7)
DT Utility
FS Granted
LN.CNT 455
INCL INCLM: 604/096.000
INCLS: 606/194.000
NCL NCLM: 604/096.010
NCLS: 604/913.000; 606/194.000
IC [5]
ICM A61M025-10
IPCI A61M0025-10 [ICM,5]
IPCR A61M0029-02 [I,A]; A61M0029-02 [I,C]
EXF 604/96-103; 606/191; 606/192; 606/194

L8 ANSWER 164 OF 180 USPATFULL on STN

Full Text | Cited References

AN 89:90478 USPATFULL
TI Endoprosthesis for repairing a damaged vessel
IN Lindemann, Peer, West Bend, WI, United States
Haughton, Victor M., Dousman, WI, United States
PA Servetus Partnership, Milwaukee, WI, United States (U.S. corporation)
PI US 4878906 19891107
AI US 1988-202562 19880606 (7)
RLI Division of Ser. No. US 1986-843992, filed on 25 Mar 1986, now abandoned
DT Utility
FS Granted
LN.CNT 485
INCL INCLM: 623/001.000
INCLS: 128/334.000R
NCL NCLM: 623/003.180
NCLS: 606/108.000; 606/155.000
IC [4]
ICM A61F002-06
ICS A61B017-04
IPCI A61F0002-06 [ICM,4]; A61B0017-04 [ICS,4]
IPCR A61F0002-06 [I,A]; A61F0002-06 [I,C]
EXF 623/1; 623/12; 623/66; 128/303; 128/11; 128/325; 128/334R; 128/341; 128/343; 128/344; 604/96; 604/101; 604/104; 600/36

L8 ANSWER 165 OF 180 USPAT2 on STN

Full Text | Cited References

AN 2004:248496 USPAT2
TI Fluid exchange system for controlled and localized irrigation and aspiration
IN MacMahon, John M., Mountain View, CA, UNITED STATES
Goff, Thomas G., Menlo Park, CA, UNITED STATES
Courtney, Brian K., Palo Alto, CA, UNITED STATES
PA Kerberos Proximal Solutions, Mountain View, CA, UNITED STATES (U.S. corporation)

PI US 6878128 B2 20050412
AI US 2004-819409 20040406 (10)
RLI Division of Ser. No. US 2002-198718, filed on 17 Jul 2002, Pat. No. US 6827701
PRAI US 2001-306315P 20010717 (60)
DT Utility
FS GRANTED
LN.CNT 1837
INCL INCLM: 604/038.000
INCLS: 604/043.000; 604/121.000; 604/246.000
NCL NCLM: 604/038.000; 604/030.000
NCLS: 604/043.000; 604/121.000; 604/246.000
IC [7]
ICM A61M005-178
ICS A61M003-00; A61M001-00; A61M005-00
IPCI A61M0001-00 [ICM,7]
IPCI-2 A61M0005-178 [ICM,7]; A61M0003-00 [ICS,7]; A61M0001-00 [ICS,7]; A61M0005-00 [ICS,7]
IPCR A61M0001-00 [I,A]; A61M0001-00 [I,C]
EXF 604/6.11; 604/6.12; 604/19; 604/30-38; 604/43; 604/118; 604/121; 604/181; 604/236; 604/246; 417/341-343; 417/539

L8 ANSWER 166 OF 180 USPAT2 on STN
Full Text | Citing References
AN 2004:159543 USPAT2
TI Method for revascularizing a coronary vessel
IN Knudson, Mark B., Shoreview, MN, UNITED STATES
Giese, William L., Arlington, VA, UNITED STATES
PA Percardia, Inc., Merrimack, NH, UNITED STATES (U.S. corporation)
PI US 6913021 B2 20050705
AI US 2003-732378 20031211 (10)
RLI Continuation-in-part of Ser. No. US 2002-43684, filed on 9 Jan 2002, Pat. No. US 6701932 Continuation of Ser. No. US 1999-326819, filed on 7 Jun 1999, Pat. No. US 6454794 Division of Ser. No. US 1997-882397, filed on 25 Jun 1997, Pat. No. US 5944019 Continuation-in-part of Ser. No. US 1996-689773, filed on 13 Aug 1996, Pat. No. US 5755682
DT Utility
FS GRANTED
LN.CNT 1952
INCL INCLM: 128/898.000
NCL NCLM: 128/898.000; 604/008.000
IC [7]
ICM A61B017-00
IPCI A61F0002-06 [ICM,7]
IPCI-2 A61B0017-00 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C]; A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]; A61B0018-20 [N,C]; A61B0018-24 [N,A]; A61F0002-02 [N,A]; A61F0002-02 [N,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61F0002-24 [I,A]; A61F0002-24 [I,C]
EXF 128/898; 606/153-159; 606/192; 606/194; 606/195; 606/198; 600/16-18; 623/11.11; 623/1.11; 623/23.68; 623/1.24; 623/1.3-1.32; 623/2.1; 623/1.49; 623/23.64

L8 ANSWER 167 OF 180 USPAT2 on STN
Full Text | Citing References
AN 2004:102120 USPAT2

TI Method to deliver blood from a heart chamber to a vessel
IN Knudson, Mark B., Shoreview, MN, UNITED STATES
Giese, William L., Arlington, VA, UNITED STATES
PA Percardia, Inc., Merrimack, NH, UNITED STATES (U.S. corporation)
PI US 6929011 B2 20050816
AI US 2003-684198 20031010 (10)
RLI Continuation of Ser. No. US 2002-43684, filed on 9 Jan 2002, Pat. No. US 6701932 Continuation of Ser. No. US 1999-326819, filed on 7 Jun 1999, Pat. No. US 6454794, issued on 24 Sep 2002 Division of Ser. No. US 1997-882397, filed on 25 Jun 1997, Pat. No. US 5944019, issued on 31 Aug 1999 Continuation-in-part of Ser. No. US 1996-689773, filed on 13 Aug 1996, Pat. No. US 5755682, issued on 26 May 1998
DT Utility
FS GRANTED
LN.CNT 1885
INCL INCLM: 128/898.000
NCL NCLM: 128/898.000; 604/008.000
IC [7]
ICM A61B017-00
IPCI A61F0002-06 [ICM,7]
IPCI-2 A61B0017-00 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C]; A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]; A61B0018-20 [N,C]; A61B0018-24 [N,A]; A61F0002-02 [N,A]; A61F0002-02 [N,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61F0002-24 [I,A]; A61F0002-24 [I,C]
EXF 128/898; 600/16-18; 606/153-156; 606/159; 606/192; 606/194-196; 606/198; 623/1.1; 623/1.13; 623/1.14; 623/1.24; 623/1.3-1.32; 623/1.49; 623/11.11

L8 ANSWER 168 OF 180 USPAT2 on STN

Full Text | Image | References

AN 2003:113855 USPAT2
TI Intraluminally directed anvil apparatus and related methods and systems
IN Blatter, Duane D., Salt Lake City, UT, United States
Goodrich, Kenneth C., Salt Lake City, UT, United States
Barrus, Michael C., Centerville, UT, United States
Burnett, Bruce M., Salt Lake City, UT, United States
PA Integrated Vascular Interventional Technologies, L.C. (IVIT, LC), Salt Lake City, UT, United States (U.S. corporation)
PI US 6726694 B2 20040427
AI US 2000-736839 20001214 (9)
RLI Continuation-in-part of Ser. No. US 1999-293366, filed on 16 Apr 1999, now patented, Pat. No. US 6623494 Continuation-in-part of Ser. No. US 1999-460740, filed on 14 Dec 1999, now patented, Pat. No. US 6569173
DT Utility
FS GRANTED
LN.CNT 3766
INCL INCLM: 606/139.000
INCLS: 606/153.000
NCL NCLM: 606/139.000
NCLS: 606/153.000
IC [7]
ICM A61B017-10
IPCI A61B0017-11 [ICM,7]
IPCI-2 A61B0017-10 [ICM,7]
IPCR A61B0017-03 [I,C]; A61B0017-064 [I,A]; A61B0017-064 [I,C]; A61B0017-11 [N,A]; A61B0017-115 [I,A]; A61B0017-32 [N,A]; A61B0017-32 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]

EXF 606/1; 606/108; 606/152; 606/153; 606/155; 606/170; 606/180; 606/139; 606/184; 606/185; 606/179; 128/899; 600/566; 600/567

L8 ANSWER 169 OF 180 USPAT2 on STN

Full Text | Citing References

AN 2003:113729 USPAT2
TI Method and apparatus for temporarily immobilizing a local area of tissue
IN Borst, Cornelius, Bilthoven, NETHERLANDS
Mansvelt Beck, Hendricus J., Bilthoven, NETHERLANDS
Grundeman, Paul F., Amsterdam, NETHERLANDS
Verlaan, Cornelis Wilhelmus Jozef, Soest, NETHERLANDS
PI US 2004260145 A9 20041223
AI US 2002-137159 A1 20020430 (10)
RLI Continuation of Ser. No. US 2000-678203, filed on 2 Oct 2000, PENDING Continuation-in-part of Ser. No. US 2000-493466, filed on 28 Jan 2000, GRANTED, Pat. No. US 6371906 Division of Ser. No. US 1999-334531, filed on 16 Jun 1999, GRANTED, Pat. No. US 6364826 Division of Ser. No. US 1996-725371, filed on 3 Oct 1996, GRANTED, Pat. No. US 6015378 Continuation-in-part of Ser. No. US 1995-531363, filed on 20 Sep 1995, GRANTED, Pat. No. US 5836311
DT Utility
FS APPLICATION
LN.CNT 1925
INCL INCLM: 600/037.000
INCLS: 128/857.000; 606/001.000; 606/201.000; 005/600.000
NCL NCLM: 600/037.000
NCLS: 005/600.000; 128/857.000; 606/001.000; 606/201.000
IC [7]
ICM A61F002-00
IPCI A61F0002-00 [ICM,7]
IPCI-2 A61F0002-00 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-02 [I,A]; A61B0017-02 [I,C]; A61B0017-30 [N,A]; A61B0017-30 [N,C]; A61B0019-00 [I,A]; A61B0019-00 [I,C]

L8 ANSWER 170 OF 180 USPAT2 on STN

Full Text | Citing References

AN 2003:100438 USPAT2
TI Fluid exchange system for controlled and localized irrigation and aspiration
IN MacMahon, John M., Mountain View, CA, United States
Goff, Thomas G., Menlo Park, CA, United States
Courtney, Brian K., Palo Alto, CA, United States
PA Kerberos Proximal Solutions, Mountain View, CA, United States (U.S. corporation)
PI US 6827701 B2 20041207
AI US 2002-198718 20020717 (10)
PRAI US 2001-306315P 20010717 (60)
DT Utility
FS GRANTED
LN.CNT 1928
INCL INCLM: 604/038.000
INCLS: 604/043.000; 604/121.000; 604/246.000
NCL NCLM: 604/038.000; 604/266.000
NCLS: 604/043.000; 604/121.000; 604/246.000; 604/285.000
IC [7]
ICM A61M005-178
ICS A61M003-00; A61M001-00; A61M005-00

IPCI A61M0031-00 [ICM,7]; A61M0025-00 [ICS,7]
IPCI-2 A61M0005-178 [ICM,7]; A61M0003-00 [ICS,7]; A61M0001-00 [ICS,7]; A61M0005-00 [ICS,7]
IPCR A61M0001-00 [I,A]; A61M0001-00 [I,C]
EXF 604/6.11; 604/6.12; 604/19; 604/30; 604/36; 604/38; 604/43; 604/118; 604/121; 604/181; 604/236; 604/246; 417/341-343; 417/539; 606/167; 606/185

L8 ANSWER 171 OF 180 USPAT2 on STN

Full Text | Citing References

AN 2003:79550 USPAT2
TI Stent formed from encapsulated stent preforms
IN Jayaraman, Swaminathan, Fremont, CA, United States
PA Vascular Concepts Holdings Limited, British Isles, UNITED KINGDOM (non-U.S. corporation)
PI US 6746478 B2 20040608
AI US 2002-286805 20021104 (10)
RLI Continuation of Ser. No. US 1999-440926, filed on 16 Nov 1999, now patented, Pat. No. US 6475235
DT Utility
FS GRANTED
LN.CNT 459
INCL INCLM: 623/001.150
NCL NCLM: 623/001.150; 623/001.100
IC [7]
ICM A61F002-06
IPCI A61F0002-06 [ICM,7]
IPCI-2 A61F0002-06 [ICM,7]
IPCR A61F0002-02 [N,A]; A61F0002-02 [N,C]; A61F0002-04 [N,A]; A61F0002-04 [N,C]; A61F0002-06 [I,A]; A61F0002-06 [I,C]
EXF 623/1.15; 623/1.18; 623/1.21; 623/1.39; 623/1.42; 623/1.44; 623/1.53; 623/1.54

L8 ANSWER 172 OF 180 USPAT2 on STN

Full Text | Citing References

AN 2003:11439 USPAT2
TI Aspiration method
IN Muni, Ketan P., San Jose, CA, United States
Zadno-Azizi, Gholam Reza, Newark, CA, United States
Bagaoisan, Celso, Union City, CA, United States
PA Medtronic AVE, Inc., Santa Rosa, CA, United States (U.S. corporation)
PI US 6805692 B2 20041019
AI US 2002-214450 20020805 (10)
RLI Continuation of Ser. No. US 2000-537471, filed on 24 Mar 2000, now patented, Pat. No. US 6454741 Continuation of Ser. No. US 1998-49857, filed on 27 Mar 1998, now patented, Pat. No. US 6135991 Continuation-in-part of Ser. No. US 1997-813807, filed on 6 Mar 1997, now abandoned
DT Utility
FS GRANTED
LN.CNT 979
INCL INCLM: 604/509.000
INCLS: 604/510.000; 604/096.010
NCL NCLM: 604/509.000; 604/500.000
NCLS: 604/096.010; 604/510.000; 606/200.000
IC [7]
ICM A61M031-00
ICS A61M029-00

```
       IPCI   A61M0029-00 [ICM,7]
       IPCI-2 A61M0031-00 [ICM,7]; A61M0029-00 [ICS,7]
       IPCR   A61B0017-22 [I,A]; A61B0017-22 [I,C]; A61B0018-20 [N,C];
              A61B0018-24 [N,A]; A61M0029-02 [I,A]; A61M0029-02 [I,C]
EXF    604/96.01; 604/103.05; 604/109; 604/164.13; 604/506; 604/507; 604/508;
       604/509; 604/510; 604/915; 604/916; 604/917; 604/918; 604/919; 604/920;
       604/921; 606/192; 606/193; 606/194; 606/195; 606/196; 606/197; 606/198;
       606/199; 606/200; 600/434; 600/585

L8   ANSWER 173 OF 180  USPAT2 on STN
```

Full Text | Citing References

```
AN     2002:308560  USPAT2
TI     Single cannula ventricular-assist method and apparatus
IN     Landesberg, Amir, Haifa, ISRAEL
PA     Levram Medical Devices, Ltd., Nesher, ISRAEL (non-U.S. corporation)
PI     US 6511413          B2   20030128
AI     US 2001-858343           20010516 (9)
DT     Utility
FS     GRANTED
LN.CNT 1268
INCL   INCLM: 600/017.000
       INCLS: 600/016.000; 623/003.280
NCL    NCLM:  600/017.000; 600/016.000
       NCLS:  600/016.000; 623/003.280
IC     [7]
       ICM    A61N001-362
       IPCI   A61M0001-12 [ICM,7]
       IPCI-2 A61N0001-362 [ICM,7]
       IPCR   A61M0001-10 [I,A]; A61M0001-10 [I,C]; A61M0001-12 [N,A]
EXF    600/16-18; 623/3.28

L8   ANSWER 174 OF 180  USPAT2 on STN
```

Full Text | Citing References

```
AN     2002:241510  USPAT2
TI     Electroactive polymer sensors
IN     Pelrine, Ronald E., Boulder, CO, United States
       Kornbluh, Roy D., Palo Alto, CA, United States
       Pei, Qibing, Fremont, CA, United States
       Eckerle, Joseph Stephen, Redwood City, CA, United States
PA     SRI International, Menlo Park, CA, United States (U.S. corporation)
PI     US 6809462          B2   20041026
AI     US 2001-7705             20011206 (10)
RLI    Continuation-in-part of Ser. No. US 2001-828496, filed on 4 Apr 2001
PRAI   US 2001-293004P      20010522 (60)
       US 2000-194817P      20000405 (60)
DT     Utility
FS     GRANTED
LN.CNT 2461
INCL   INCLM: 310/800.000
NCL    NCLM:  310/319.000; 324/727.000
       NCLS:  310/800.000
IC     [7]
       ICM    H02N002-00
       IPCI   G01R0029-22 [ICM,7]
       IPCI-2 H02N0002-00 [ICM,7]
       IPCR   A63H0003-00 [I,C]; A63H0003-36 [I,A]; H01L0041-113 [I,A];
              H01L0041-113 [I,C]
EXF    310/316.03; 310/319; 310/328; 310/338; 310/339; 310/800
```

L8 ANSWER 175 OF 180 USPAT2 on STN

Full Text | Citing References

AN 2002:179376 USPAT2
TI Shape memory polymer actuator and catheter
IN Maitland, Duncan J., Pleasant Hill, CA, United States
Lee, Abraham P., Walnut Creek, CA, United States
Schumann, Daniel L., Concord, CA, United States
Matthews, Dennis L., Moss Beach, CA, United States
Decker, Derek E., Byron, CA, United States
Jungreis, Charles A., Pittsburgh, PA, United States
PA The Regents of the University of California, Oakland, CA, United States (U.S. corporation)
PI US 6740094 B2 20040525
AI US 2001-761023 20010116 (9)
PRAI US 2000-246293P 20001106 (60)
DT Utility
FS GRANTED
LN.CNT 1019
INCL INCLM: 606/108.000
NCL NCLM: 606/108.000; 606/194.000
IC [7]
ICM A61F011-00
IPCI A61M0029-00 [ICM,7]
IPCI-2 A61F0011-00 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-22 [I,A]; A61B0017-22 [I,C]
EXF 606/159; 606/108; 606/205-210; 606/211; 606/151; 606/157

L8 ANSWER 176 OF 180 USPAT2 on STN

Full Text | Citing References

AN 2002:179346 USPAT2
TI Method for organ positioning and stabilization
IN Keogh, James R., Maplewood, MN, United States
Jahns, Scott E., Hudson, WI, United States
Colson, Michael A., Chanhassen, MN, United States
Guenst, Gary W., Collegeville, PA, United States
Olig, Christopher, Eden Prairie, MN, United States
Pignato, Paul A., Stacy, MN, United States
Montpetit, Karen, Mendota Heights, MN, United States
Daigle, Thomas, Corcoran, MN, United States
Gubbin, Douglas H., Brooklyn Park, MN, United States
O'Neill, William G., Maple Grove, MN, United States
Jolly, Katherine, Shoreview, MN, United States
PA Medtronic, Inc., Minneapolis, MN, United States (U.S. corporation)
PI US 6447443 B2 20020910
AI US 2001-879294 20010612 (9)
PRAI US 2001-286952P 20010426 (60)
US 2001-282029P 20010406 (60)
US 2001-263739P 20010124 (60)
US 2001-261343P 20010113 (60)
DT Utility
FS GRANTED
LN.CNT 2239
INCL INCLM: 600/037.000
INCLS: 600/205.000; 600/235.000; 600/232.000; 128/898.000
NCL NCLM: 600/037.000; 606/001.000
NCLS: 128/898.000; 600/205.000; 600/232.000; 600/235.000

```
IC      [7]
        ICM    A61F002-00
        ICS    A61B001-32; A61B019-00
        IPCI   A61B0017-00 [ICM,7]
        IPCI-2 A61F0002-00 [ICM,7]; A61B0001-32 [ICS,7]; A61B0019-00 [ICS,7]
        IPCR   A61B0017-02 [I,A]; A61B0017-02 [I,C]; A61B0017-22 [N,A];
               A61B0017-22 [N,C]; A61B0017-28 [N,A]; A61B0017-28 [N,C];
               A61B0017-30 [N,A]; A61B0017-30 [N,C]; A61N0001-36 [N,A];
               A61N0001-36 [N,C]
EXF     600/37; 600/201; 600/205; 600/235; 600/232; 606/1; 128/898; 607/2;
        607/4; 607/7; 607/9

L8   ANSWER 177 OF 180  USPAT2 on STN
```

Full Text | String References

```
AN      2002:172589  USPAT2
TI      Method and device for preventing contrast associated nephropathy
IN      Reich, David, Riverdale, NY, United States
PA      Mount Sinai School of Medicine of New York University, New York, NY,
        United States (U.S. corporation)
PI      US 6554819          B2   20030429
AI      US 2001-757301           20010109 (9)
DT      Utility
FS      GRANTED
LN.CNT 302
INCL    INCLM: 604/508.000
        INCLS: 604/509.000; 604/004.010; 604/006.090
NCL     NCLM:  604/508.000; 604/005.010
        NCLS:  604/004.010; 604/006.090; 604/509.000; 604/096.010
IC      [7]
        ICM    A61M037-00
        ICS    A61M031-00
        IPCI   A61M0037-00 [ICM,7]; A61M0029-00 [ICS,7]
        IPCI-2 A61M0037-00 [ICM,7]; A61M0031-00 [ICS,7]
        IPCR   A61M0001-36 [I,A]; A61M0001-36 [I,C]; A61M0031-00 [I,A];
               A61M0031-00 [I,C]
EXF     604/4.01; 604/5.01; 604/96.01; 604/102.2; 604/102.3; 604/508; 604/6.09;
        604/5.08; 606/194

L8   ANSWER 178 OF 180  USPAT2 on STN
```

Full Text | String References

```
AN      2002:126960  USPAT2
TI      Method and apparatus for revascularizing a coronary vessel with an
        implant having a tapered myocardial leg
IN      Knudson, Mark B., Shoreview, MN, United States
        Giese, William L., Arlington, VA, United States
PA      Percardia, Inc., Merrimack, NH, United States (U.S. corporation)
PI      US 6701932          B2   20040309
AI      US 2002-43684            20020109 (10)
RLI     Continuation of Ser. No. US 1999-326819, filed on 7 Jun 1999, now
        patented, Pat. No. US 6454794, issued on 24 Sep 2002 Division of Ser.
        No. US 1997-882397, filed on 25 Jun 1997, now patented, Pat. No. US
        5944019, issued on 31 Aug 1999 Continuation-in-part of Ser. No. US
        1996-689773, filed on 13 Aug 1996, now patented, Pat. No. US 5755682,
        issued on 26 May 1998
DT      Utility
FS      GRANTED
LN.CNT 1773
INCL    INCLM: 128/898.000
```

```
NCL     NCLM:  128/898.000; 604/008.000
IC      [7]
        ICM    A61B017-00
        IPCI   A61F0002-06 [ICM,7]
        IPCI-2 A61B0017-00 [ICM,7]
        IPCR   A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C];
               A61B0017-11 [I,A]; A61B0017-12 [N,A]; A61B0017-12 [N,C];
               A61B0017-34 [N,A]; A61B0017-34 [N,C]; A61B0018-20 [N,C];
               A61B0018-24 [N,A]; A61F0002-02 [N,A]; A61F0002-02 [N,C];
               A61F0002-06 [I,A]; A61F0002-06 [I,C]; A61F0002-24 [I,A];
               A61F0002-24 [I,C]
EXF     128/898; 606/153; 606/154; 606/155; 606/156; 606/159; 606/192; 606/194;
        606/195; 606/198; 600/16; 600/17; 600/18; 623/11.11; 623/23.64;
        623/23.68; 623/1.13; 623/1.24; 623/1.3; 623/1.31; 623/1.32; 623/1.49;
        623/2.1; 623/1.1

L8   ANSWER 179 OF 180  USPAT2 on STN
```

Full Text | Citing References

```
AN      2001:139705  USPAT2
TI      Externally directed anastomosis systems and externally positioned
        anastomosis fenestra cutting apparatus
IN      Blatter, Duane D., Salt Lake City, UT, United States
        Goodrich, Kenneth C., Salt Lake City, UT, United States
        Barrus, Mike C., Bountiful, UT, United States
        Burnett, Bruce M., Salt Lake City, UT, United States
        Tullius, Jr., Nemo J., Tayorsville, UT, United States
PA      Integrated Vascular Interventional Technologies, LC, Salt Lake City, UT,
        United States (U.S. corporation)
PI      US 6551334          B2   20030422
AI      US 2000-736781           20001214 (9)
RLI     Continuation-in-part of Ser. No. US 1999-460740, filed on 14 Dec 1999
        Continuation-in-part of Ser. No. US 1999-293366, filed on 16 Apr 1999
DT      Utility
FS      GRANTED
LN.CNT 3605
INCL    INCLM: 606/153.000
        INCLS: 606/170.000; 606/184.000; 600/567.000
NCL     NCLM:  606/153.000
        NCLS:  600/567.000; 606/170.000; 606/184.000
IC      [7]
        ICM    A61B017-32
        IPCI   A61B0017-08 [ICM,7]
        IPCI-2 A61B0017-32 [ICM,7]
        IPCR   A61B0017-03 [I,C]; A61B0017-064 [I,A]; A61B0017-064 [I,C];
               A61B0017-11 [N,A]; A61B0017-115 [I,A]; A61B0017-32 [N,A];
               A61B0017-32 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]
EXF     606/149; 606/150; 606/151; 606/153; 606/159; 606/167; 606/170; 606/184;
        600/566; 600/567; 128/898

L8   ANSWER 180 OF 180  USPAT2 on STN
```

Full Text | Citing References

```
AN      2001:95525  USPAT2
TI      External anastomosis operators and related systems for anastomosis
IN      Blatter, Duane D., Salt Lake City, UT, United States
        Goodrich, Kenneth C., Salt Lake City, UT, United States
        Barrus, Michael C., Centerville, UT, United States
        Burnett, Bruce M., Salt Lake City, UT, United States
PA      Integrated Vascular Interventional Technologies, L.C. (IVIT, LC), Salt
```

Lake City, UT, United States (U.S. corporation)
PI US 6652542 B2 20031125
AI US 2000-737005 20001214 (9)
RLI Continuation-in-part of Ser. No. US 1999-469740, filed on 14 Dec 1999, now patented, Pat. No. US 6569173 Continuation-in-part of Ser. No. US 1999-293617, filed on 16 Apr 1999, now patented, Pat. No. US 6248117
DT Utility
FS GRANTED
LN.CNT 3710
INCL INCLM: 606/153.000
INCLS: 606/151.000
NCL NCLM: 606/153.000
NCLS: 606/151.000
IC [7]
ICM A61B017-08
IPCI A61B0017-11 [ICM,7]
IPCI-2 A61B0017-08 [ICM,7]
IPCR A61B0017-00 [N,A]; A61B0017-00 [N,C]; A61B0017-03 [I,C]; A61B0017-064 [I,A]; A61B0017-064 [I,C]; A61B0017-068 [N,A]; A61B0017-068 [I,C]; A61B0017-072 [I,A]; A61B0017-11 [N,A]; A61B0017-115 [I,A]; A61B0017-32 [N,A]; A61B0017-32 [N,C]; A61B0017-34 [N,A]; A61B0017-34 [N,C]
EXF 606/153; 606/167; 606/150; 606/151; 606/152; 606/217; 606/219; 606/157; 606/158; 606/149; 606/566; 606/567

=> d an ti in pi kwic 163 167 178 180

L8 ANSWER 163 OF 180 USPATFULL on STN

Full Text | Citing References

AN 93:5029 USPATFULL
TI Apparatus and method for **angioplasty** and for preventing re-stenosis
IN Woods, W. T., R.R. 1-Box 13, Chatham, IL, United States 62629
PI US 5180366 19930119
TI Apparatus and method for **angioplasty** and for preventing re-stenosis
AB The present invention provides an **angioplasty** method and apparatus for performing same that reduces or eliminates restenosis in arteries that have undergone **angioplasty**. The invention prevents the proliferative response. To this end, the present invention provides a method and apparatus for depositing a. . .
SUMM . . . invention relates to the treatment of cardiovascular disease. More specifically, the present invention relates to an apparatus and method for **angioplasty** that prevents re-stenosis.
SUMM . . . of diseases in which the lumen of an artery becomes narrowed or blocked (occluded). The narrowing of the artery restricts **blood flow** to the organ that is nourished by the artery. The reduced **blood flow** results in the deterioration of the organ to the point wherein the organ can be permanently damaged unless the blockage of **blood flow** is removed.
SUMM . . . results in a heart attack. A variety of therapies have been developed to prevent heart attacks and to restore adequate **blood flow** to the heart. These therapies include dilating the artery utilizing a pharmaceutical, surgical intervention by replacing the blocked segment with a new segment (or coronary artery by-pass graft), or the use of a catheter-mounted **mechanical device**, such as a balloon.
SUMM One such method is known as **angioplasty**, or when used with coronary arteries, percutaneous transluminal coronary **angioplasty**. Generally, **angioplasty** is performed using a multilumen inflatable balloon catheter. At least one lumen of the catheter is open ended and allows. . . the passage of a guide wire, or in some instances, the direct

intra-arterial infusion of a pharmaceutical agent therethrough. In **angioplasty**, the guide wire is directed to the area of arterial narrowing using x-ray monitoring, for example, a roentgengraph or fluoroscope.. . .

SUMM The typical **angioplasty** procedure involves the introduction of the catheter into the arterial system of the patient, for example, through the femoral artery. . .

SUMM . . . United States in 1989, hundreds of thousands of angioplasties were performed. This number is rapidly increasing. Fortunately, for many patients, **angioplasty** permanently reopens the previously occluded arteries. However, in 30% of the occluded arteries which are opened by an **angioplasty** technique, the arteries re-occlude within six months of the procedure. This results in symptoms of cardiac ischemia, such as chest. . .

SUMM . . . stent lattice re-occluding the lumen. Accordingly, there is a need for preventing or reducing restenosis in arteries that have undergone **angioplasty**.

SUMM The present invention provides an **angioplasty** method and apparatus for performing same that reduces or eliminates restenosis in arteries that have undergone the **angioplasty**. The invention prevents the proliferative response. Pursuant to the present invention, growth and division of endothelial cells is promoted selectively,. . .

SUMM In an embodiment, a multilumen catheter for performing **angioplasty** and limiting or preventing re-stenosis is provided comprising a shaft defining a first lumen. An inflatable balloon is located at. . .

DETD The present invention provides an apparatus and method for removing arterial occlusions and eliminating or limiting re-stenosis. Although **angioplasty** is a procedure of choice for reopening occluded blood vessels, due to its relative safety, a major draw back is. . .

DETD . . . an anti-proliferation agent to select tissue in the vessel. The anti-proliferation agent prevents re-stenosis by preventing cell proliferation after the **angioplasty**. In the preferred embodiment illustrated, the means for delivering an anti-proliferation agent is a drug delivery collar 26. As illustrated. . .

CLM What is claimed is:

1. An apparatus for performing **angioplasty** comprising: a multilumen catheter having an inflatable balloon and a separate means for implanting an anti-proliferation agent that is in. . .

6. A multilumen catheter for performing **angioplasty** comprising: an inflatable balloon located at a distal end of the catheter; a rigid nonexpandable collar for implanting an anti-proliferation. . .

12. The multilumen catheter for performing **angioplasty** and limiting or preventing re-stenosis comprising: a shaft defining a first lumen; an inflatable balloon located at an end of. . .

17. The multilumen catheter for performing **angioplasty** and limiting or preventing re-stenosis comprising: a shaft defining a first lumen; an inflatable balloon located at an end of. . .

L8 ANSWER 167 OF 180 USPAT2 on STN

Full Text | Title References

AN 2004:102120 USPAT2

TI Method to deliver blood from a heart chamber to a vessel

IN Knudson, Mark B., Shoreview, MN, UNITED STATES
Giese, William L., Arlington, VA, UNITED STATES

PI US 6929011 B2 20050816

AB . . . revascularizing a coronary vessel with a conduit through the heart wall having a diameter transition in the myocardial leg, wherein **blood flow** is in the direction of transition from larger to smaller diameter. A method for revascularizing a coronary vessel using an. . .

a first end, and inserting the first end through the myocardium into a heart chamber so that the implant directs **blood flow** into the coronary vessel. A transmyocardial implant with a myocardial leg including point of minimum diameter and a first end. . .

SUMM B. **Angioplasty**

SUMM The re-opening of the stenosed or occluded site can be accomplished by several techniques. **Angioplasty**, the expansion of areas of narrowing of a blood vessel, is most often accomplished by the intravascular introduction of a. . .

SUMM **Angioplasty**, and the other above-described techniques (although less invasive than coronary artery bypass grafting) are fraught with a correspondingly greater failure. . . reports suggest re-stenosis is realized in as many as 25 to 55 percent of cases within 6 months of successful **angioplasty**. See Bojan Cercek et al., 68 AM. J. CARDIOL. 24C-33C (Nov. 4, 1991). It is presently believed stenting can reduce. . .

SUMM . . . of approaches to delay or prevent re-blockage have evolved. One is to stent the site at the time of balloon **angioplasty**. Another is pyroplasty, where the balloon itself is heated during inflation. As these alternative techniques are relatively recent innovations, it. . .

SUMM . . . neck to the navel, the sawing of the sternum in half longitudinally, and the spreading of the ribcage with a **mechanical device** to afford prolonged exposure of the heart cavity. If the heart chamber or a vessel is opened, a heart-lung, or. . .

SUMM . . . of the heart enhances visualization of the coronary vessels and eliminates movement of the heart while removing the need for **blood flow** through the coronary arteries during the procedure. This provides the surgeon with a "dry field" in which to operate and. . .

SUMM In view of the above, it is desirable to provide other methods by which adequate **blood flow** to the heart can be re-established and which do not rely on the transposition of a patient's own arteries or. . .

SUMM Certain methods have been proposed to provide a direct **blood flow** path from the left ventricle directly through the heart wall to the coronary artery. These are described in U.S. Pat.. . .

SUMM The interruption of **blood flow** during either diastole or systole is undesirable since such interruption can result in areas of stagnant or turbulent **blood flow**. Such areas of stagnation can result in clot formation which can result in occlusion or thrombi breaking lose. Such thrombi. . . more areas of cardiac muscle ischemia (myocardial infarction) which can be fatal. Further, the teachings of the aforementioned patents direct **blood flow** with a substantial velocity vector orthogonal to the axis of the coronary artery. Such flow can damage the wall of. . .

SUMM Providing direct **blood flow** from the left ventricle of the coronary artery has been criticized. For example, Munro et al., The Possibility of Myocardial. . .

SUMM . . . as will be more fully described, the present invention is directed to an apparatus and method for providing a direct **blood flow** path from a heart chamber to a coronary artery downstream of an obstruction. Counter to the teachings of the prior art, the present invention provides substantial net **blood flow** to the coronary artery.

SUMM Methods of catheterization of the coronary vasculature, techniques utilized in the performance of **angioplasty** and atherectomy, and the variety of stents in current clinical use have been summarized. See generally Bruce F. Waller &. . .

SUMM . . . revascularizing a coronary vessel with a conduit through the heart wall having a diameter transition in the myocardial leg, wherein **blood flow** is in the direction of transition from larger to smaller diameter. The present invention further relates to revascularizing a

coronary. . . a first end, and inserting the first end through the myocardium into a heart chamber so that the implant directs **blood flow** into the coronary vessel. The present invention also relates to a transmyocardial implant with a myocardial leg including point of. . .

DETD . . . then providing an alternative pathway for blood to flow from an aorta to a coronary artery, the invention provides a **blood flow** path leading directly from a chamber of a heart to a coronary artery at a site downstream from the stenosis. . . occlusion. Unlike U.S. Pat. Nos. 5,429,144; 5,287,861 and 5,409,019 and contrary to the teachings of these patents, the ventricular-to-coronary artery **blood flow** path remains open during both diastole and systole. The surgical placement of the apparatus of the present invention establishes this. . . will be more fully described, the invention includes means for protecting the coronary artery from direct impingement of high velocity **blood flow**.

DETD . . . FIG. 21, an obstruction 34 is shown within the lumen 48. The obstruction 34 acts to reduce the volume of **blood flow** along the direction of arrow A.

DETD . . . an opening 14a' at an axial end. Both of arms 12', 14' are cylindrical in shape and define a continuous **blood flow** pathway 11' from opening 12a' to opening 14a'.

DETD . . . a preferred embodiment. Alternatively, the axes X--X, Y--Y could define an angle greater than 90° to provide a less turbulent **blood flow** from arm 12' to arm 14'.

DETD . . . from the lower surface 40 of the coronary artery 30 into the left ventricle 44. The opening 12a' is in **blood flow** communication with the interior of the left ventricle 44 so that blood may flow from the left ventricle 44 directly. . .

DETD **Blood flow** from opening 12a' passes through the pathway 11' and is discharged through opening 14a' into the lumen 48 of the. . .

DETD In addition to directing **blood flow** downstream in the direction of arrow A, the arm 14' holds the conduit 10' within the coronary artery 30 to. . . and into the left ventricle 44. Additionally, an upper wall 14b' of arm 14' defines a region 15' against which **blood flow** may impinge. Stated differently, in the absence of an arm 14' or region 15', **blood flow** would pass through the anchor arm 12' and impinge directly against the upper wall 36 of the coronary artery 30. High velocity **blood flow** could damage the wall 36, as will be more fully described, resulting in risk to the patient.

DETD The region 15' acts as a shield to protect the coronary artery 30 from such **blood flow** and to redirect the **blood flow** axially out of opening 14a' into the coronary artery 30. This is schematically illustrated in FIG. 23. For ease of. . . axis X--X of the anchor arm 12' is shown at a non-orthogonal angle with respect to the direction A of **blood flow** in the coronary artery 30 (axis X--X may be either orthogonal or non-orthogonal to direction A). The vector B of **blood flow** from the anchor arm 12' has a vector component B' parallel to **blood flow** A and a vector component B" perpendicular to direction A. The region 15' is positioned between the wall 36 and anchor arm 12' to prevent the **blood flow** B with high vector component B" from impinging upon wall 36. The **blood flow** deflected off region 15' has a reduced vector component perpendicular to flow direction A and reduced likelihood of damage to. . .

DETD The present invention maintains **blood flow** through the conduit 10' during both diastole and systole. Therefore, while the net **blood flow** is in the direction of arrow A, during diastole, blood will flow in a direction opposite of that of arrow. . .

DETD In the view of FIG. 22, the direction of net **blood flow** is shown by arrow A. A first closure device in the form of a suture loop 300 surrounds the artery. . . means for closing the upstream opening 14a* by selectively constricting or opening the loop 300 to selectively open

or block **blood flow** through the coronary artery 30'. The first loop 300 permits the test to simulate blockage of the coronary artery 30'. . .

DETD . . . second closure device 302 functioning the same as loop 300 is placed on conduit 13 to selectively open or close **blood flow** through conduit 13.

DETD When the second device 302 is closed and the first device 300 is open, the conduit 10* simulates normal **blood flow** through a healthy coronary artery 30' and the normal **blood flow** can be measured by the flow measuring device 304. By opening second device 302 and closing the first device 300,. . .

DETD The results of the tests indicate there is a substantial net forward **blood flow** (i.e., volumetric forward flow less volumetric retro-flow) with the second device 302 remaining open during both diastole and systole and. . . to simulate an obstruction. Specifically, in the tests, net blood flows in excess of 80 percent of normal net forward **blood flow** were measured.

DETD The substantial net **blood flow** measured in animal testing through the invention is extraordinarily high when compared to minimum acceptable levels of net **blood flow** following traditional bypass techniques (i.e., about 25 percent of normal net **blood flow**). Further, the results are counter-intuitive and contradictory to the prior teachings of the art of U.S. Pat. Nos. 5,429,144; 5,287,861. . . et al. article. In addition, the present invention provides a conduit with a shielding area to prevent damaging impingement of **blood flow** directly onto the coronary artery wall as well as providing a blocking area to prevent the migration of debris from. . .

DETD As will be more fully described, the present invention places an apparatus for defining a **blood flow** conduit directly from a chamber of a heart to a coronary artery downstream of an occluded site. Before describing the. . .

DETD . . . (having an open end 12a) extends perpendicularly to arms 14, 16. The entire conduit 10 is hollow to define a **blood flow** conduit 11 providing **blood flow** communication between open ends 12a, 14a and 16a.

DETD . . . within a lumen of a coronary artery on a downstream side of an occlusion with open ends 14a, 16a in **blood flow** communication with the lumen. The anchor arm 12 is adapted to extend through and be retained in a heart wall (e.g., a wall of the left ventricle) with the open end 12a in **blood flow** communication with blood within the chamber. When so placed, the conduit 10 defines a surgically-placed conduit establishing direct **blood flow** from the heart chamber to the artery. By "direct" it is meant that the **blood flow** does not pass through the aorta as occurs in traditional bypass procedures. The conduit 10 is sufficiently rigid such that it defines an open **blood flow** path during both diastole and systole.

DETD . . . 26 in arm 16 near the open end 16a of the apparatus. The second bi-directional flow regulator 26 permits unimpeded **blood flow** in the direction of arrow B. The second bi-directional flow regulator 26 is used to permit a reduced (but not. . .

DETD . . . is schematically illustrated in FIGS. 18A through 19C. In each of these embodiments, the arrow A indicates the direction of **blood flow** from the left ventricle to the coronary artery.

DETD . . . 222 mounted in the anchor arm 12 of a rigid conduit 10. Valve 222 may be pivoted (in response to **blood flow** in the direction of arrow A) between a position with the plate 222 generally parallel to the walls 12 of the conduit 10 as illustrated in FIG. 18A. The plate 222 can be rotated (in response to **blood flow** reverse to arrow A) to a position angled relative to the walls 12 of the conduit 10 as illustrated in. . .

DETD . . . such that the cross-sectional area of the conduit 10 which remains open is sufficient to permit about 20% of the **blood flow** (measured volumetrically) to flow back through the conduit 10 in a direction opposite to that of arrow A during diastole. As a result, during systole, **blood flow** from the heart to the coronary artery urges the plate 222 to the full flow position of FIG. 18A such. . .

DETD . . . conduit 10 with the flow regulator 22a in the form of three leafs 222a, 222b, 222c which, in response to **blood flow** from the left ventricle to the coronary artery, open to a full open position shown in FIG. 19B and move. . .

DETD **Blood flow** through the normal coronary artery is cyclical. **Blood flow** is increased during diastole (when the heart muscle is in a relaxing state), and decreases or reverses during systole (when. . .

DETD As depicted in FIGS. 1C and 2D the bi-directional flow regulators 22, 22' provide full **blood flow** in the direction of A, which is from a chamber of a heart into the conduit 10, 10' via the. . . is during this phase of the cardiac cycle that the external pressure on the coronary artery microcirculation is also highest, **blood flow** through the lumen 11, 11' of the conduit 10, 10' could be limited. To counteract this tendency, the conduit 10,. . .

DETD . . . energy stored in 29, 29' of the CPR 24, 24' is then re-converted to kinetic energy in the form of **blood flow** out of the storage chamber 27, 27' of the conduit 10, 10' via the lumen 11, 11' of arm 28,. . .

DETD . . . 14', 16 of the conduit 10, 10' of the present invention should effectively approximate that diameter necessary to provide adequate **blood flow** through the downstream lumen of the conduit to effectively oxygenate the cardiac musculature normally supplied by the microcirculation of the. . . 14', 16 of the conduit 10, 10' of the present invention should effectively approximate that diameter necessary to provide adequate **blood flow** through the lumen of the device to effectively oxygenate the cardiac musculature normally supplied by the microcirculation of the coronary. . .

DETD . . . a reduced back-flow to a full forward flow position) can be determined by the dynamic measurements of coronary artery pressure, **blood flow**, and heart chamber pressures through selective catheterization with standard techniques. See Minoru Hongo et al., 127(3) AM. HEART J. 545-51. . .

DETD The anchor arm 12, 12' is sized to maximize net **blood flow** from the left ventricle to the coronary artery. Through simulation testing, a counter-intuitive indication is that maximizing the diameter of. . . fistula (i.e., without a flow regulator 22) suggests that the smaller diameter of 1.50 mm most closely approximates normal coronary **blood flow** and minimizes back flow thus maximizing net forward flow.

DETD . . . 15 of arms 14, 14 intersects axis X--X. The region 15 acts as a deflection surface to prevent high velocity **blood flow** from arm 12 impinging directly upon the coronary artery wall. Instead, the high velocity **blood flow** impinges upon region 15 and is directed axially into the coronary artery. As a result, the coronary artery wall covered by region 15 is protected from damage which would otherwise be caused by the high velocity **blood flow** and the blood components are transitioned to axial flow with a minimum of cell damaging shear.

DETD . . . a taper. In other words, the arm 12" is widest at opening 12a". The taper and angle act to reduce **blood flow** velocity and to restrict back flow (arrows B) while facilitating forward flow (arrow A'). Also, the blood in the forward. . .

DETD Fifth, **blood flow** through the target coronary artery 30 is halted by standard techniques. For example, standard techniques include clamping the aorta above. . .

DETD Thirteenth, the clamps or sutures closing off **blood flow** to the

coronary artery are released.

DETD Dependent on the degree of narrowing or occlusion of the coronary artery, standard **angioplasty**, atherectomy, or some similar procedure can be optionally performed if passage of the catheter tip 136 (FIG. 11A) is hindered. **Angioplasty**, arthrectomy, and the like could optionally precede the catheter-controlled bypass procedure.

DETD The hollow tube 71 can, but may not necessarily, be equipped with a bi-directional flow regulator 74 to provide full **blood flow** in the direction of arrow C with reduced (but not blocked) **blood flow** opposite the direction of arrow C. An array of such hollow tubes 71 of various dimensions can be available to. . .

DETD . . . the heart through a port internal to the third intraventricular catheter 71. The introduction of angiographic dye can allow the **blood flow** to be visualized under fluoroscopy, digital subtraction angiography, or similar standard techniques. By such radiographic examination, **blood flow** directly from a chamber of a heart into a coronary artery can be ascertained. In cases where a bi-directional flow. . .

L8 ANSWER 178 OF 180 USPAT2 on STN

Full Text | Claims | References

AN 2002:126960 USPAT2

TI Method and apparatus for revascularizing a coronary vessel with an implant having a tapered myocardial leg

IN Knudson, Mark B., Shoreview, MN, United States
Giese, William L., Arlington, VA, United States

PI US 6701932 B2 20040309

AB . . . revascularizing a coronary vessel with a conduit through the heart wall having a diameter transition in the myocardial leg, wherein **blood flow** is in the direction of transition from larger to smaller diameter. A method for revascularizing a coronary vessel using an. . . a first end, and inserting the first end through the myocardium into a heart chamber so that the implant directs **blood flow** into the coronary vessel. A transmyocardial implant with a myocardial leg including point of minimum diameter and a first end. . .

SUMM B. **Angioplasty**

SUMM The re-opening of the stenosed or occluded site can be accomplished by several techniques. **Angioplasty**, the expansion of areas of narrowing of a blood vessel, is most often accomplished by the intravascular introduction of a. . .

SUMM **Angioplasty**, and the other above-described techniques (although less invasive than coronary artery bypass grafting) are fraught with a correspondingly greater failure. . . reports suggest re-stenosis is realized in as many as 25 to 55 percent of cases within 6 months of successful **angioplasty**. See Bojan Cercek et al., 68 AM. J. CARDIOL. 24C-33C (Nov. 4, 1991). It is presently believed stenting can reduce. . .

SUMM . . . of approaches to delay or prevent re-blockage have evolved. One is to stent the site at the time of balloon **angioplasty**. Another is pyroplasty, where the balloon itself is heated during inflation. As these alternative techniques are relatively recent innovations, it. . .

SUMM . . . neck to the navel, the sawing of the sternum in half longitudinally, and the spreading of the ribcage with a **mechanical device** to afford prolonged exposure of the heart cavity. If the heart chamber or a vessel is opened, a heart-lung, or. . .

SUMM . . . of the heart enhances visualization of the coronary vessels and eliminates movement of the heart while removing the need for **blood flow** through the coronary arteries during the procedure. This provides

the surgeon with a "dry field" in which to operate and. . .

SUMM In view of the above, it is desirable to provide other methods by which adequate **blood flow** to the heart can be re-established and which do not rely on the transposition of a patient's own arteries or. . .

SUMM Certain methods have been proposed to provide a direct **blood flow** path from the left ventricle directly through the heart wall to the coronary artery. These are described in U.S. Pat.. . .

SUMM The interruption of **blood flow** during either diastole or systole is undesirable since such interruption can result in areas of stagnant or turbulent **blood flow**. Such areas of stagnation can result in clot formation which can result in occlusion or thrombi breaking lose. Such thrombi. . . more areas of cardiac muscle ischemia (myocardial infarction) which can be fatal. Further, the teachings of the aforementioned patents direct **blood flow** with a substantial velocity vector orthogonal to the axis of the coronary artery. Such flow can damage the wall of. . .

SUMM Providing direct **blood flow** from the left ventricle of the coronary artery has been criticized. For example, Munro et al., The Possibility of Myocardial. . .

SUMM . . . as will be more fully described, the present invention is directed to an apparatus and method for providing a direct **blood flow** path from a heart chamber to a coronary artery downstream of an obstruction. Counter to the teachings of the prior art, the present invention provides substantial net **blood flow** to the coronary artery.

SUMM Methods of catheterization of the coronary vasculature, techniques utilized in the performance of **angioplasty** and atherectomy, and the variety of stents in current clinical use have been summarized. See generally Bruce F. Waller &. . .

SUMM . . . revascularizing a coronary vessel with a conduit through the heart wall having a diameter transition in the myocardial leg, wherein **blood flow** is in the direction of transition from larger to smaller diameter. The present invention further relates to revascularizing a coronary. . . a first end, and inserting the first end through the myocardium into a heart chamber so that the implant directs **blood flow** into the coronary vessel. The present invention also relates to a transmyocardial implant with a myocardial leg including point of. . .

DETD . . . then providing an alternative pathway for blood to flow from an aorta to a coronary artery, the invention provides a **blood flow** path leading directly from a chamber of a heart to a coronary artery at a site downstream from the stenosis. . . occlusion. Unlike U.S. Pat. Nos. 5,429,144; 5,287,861 and 5,409,019 and contrary to the teachings of these patents, the ventricular-to-coronary artery **blood flow** path remains open during both diastole and systole. The surgical placement of the apparatus of the present invention establishes this. . . will be more fully described, the invention includes means for protecting the coronary artery from direct impingement of high velocity **blood flow**.

DETD . . . FIG. 21, an obstruction 34 is shown within the lumen 48. The obstruction 34 acts to reduce the volume of **blood flow** along the direction of arrow A.

DETD . . . an opening 14a' at an axial end. Both of arms 12', 14' are cylindrical in shape and define a continuous **blood flow** pathway 11' from opening 12a' to opening 14a'.

DETD . . . a preferred embodiment. Alternatively, the axes X--X, Y--Y could define an angle greater than 90° to provide a less turbulent **blood flow** from arm 12' to arm 14'.

DETD . . . from the lower surface 40 of the coronary artery 30 into the left ventricle 44. The opening 12a' is in **blood flow** communication with the interior of the left ventricle 44 so that blood may flow from the left ventricle 44 directly. . .

DETD **Blood flow** from opening 12a' passes through the pathway 11' and is

discharged through opening 14a' into the lumen 48 of the. . .

DETD In addition to directing **blood flow** downstream in the direction of arrow A, the arm 14' holds the conduit 10' within the coronary artery 30 to. . . and into the left ventricle 44. Additionally, an upper wall 14b' of arm 14' defines a region 15' against which **blood flow** may impinge. Stated differently, in the absence of an arm 14' or region 15', **blood flow** would pass through the anchor arm 12' and impinge directly against the upper wall 36 of the coronary artery 30. High velocity **blood flow** could damage the wall 36, as will be more fully described, resulting in risk to the patient.

DETD The region 15' acts as a shield to protect the coronary artery 30 from such **blood flow** and to redirect the **blood flow** axially out of opening 14a' into the coronary artery 30. This is schematically illustrated in FIG. 23. For ease of. . . axis X--X of the anchor arm 12' is shown at a non-orthogonal angle with respect to the direction A of **blood flow** in the coronary artery 30 (axis X--X may be either orthogonal or non-orthogonal to direction A). The vector B of **blood flow** from the anchor arm 12' has a vector component B' parallel to **blood flow** A and a vector component B" perpendicular to direction A. The region 15' is positioned between the wall 36 and anchor arm 12' to prevent the **blood flow** B with high vector component B" from impinging upon wall 36. The **blood flow** deflected off region 15' has a reduced vector component perpendicular to flow direction A and reduced likelihood of damage to. . .

DETD The present invention maintains **blood flow** through the conduit 10' during both diastole and systole. Therefore, while the net **blood flow** is in the direction of arrow A, during diastole, blood will flow in a direction opposite of that of arrow. . .

DETD In the view of FIG. 22, the direction of net **blood flow** is shown by arrow A. A first closure device in the form of a suture loop 300 surrounds the artery. . . means for closing the upstream opening 14a* by selectively constricting or opening the loop 300 to selectively open or block **blood flow** through the coronary artery 30'. The first loop 300 permits the test to simulate blockage of the coronary artery 30'. . .

DETD . . . second closure device 302 functioning the same as loop 300 is placed on conduit 13 to selectively open or close **blood flow** through conduit 13.

DETD When the second device 302 is closed and the first device 300 is open, the conduit 10* simulates normal **blood flow** through a healthy coronary artery 30' and the normal **blood flow** can be measured by the flow measuring device 304. By opening second device 302 and closing the first device 300,. . .

DETD The results of the tests indicate there is a substantial net forward **blood flow** (i.e., volumetric forward flow less volumetric retro-flow) with the second device 302 remaining open during both diastole and systole and. . . to simulate an obstruction. Specifically, in the tests, net blood flows in excess of 80 percent of normal net forward **blood flow** were measured.

DETD The substantial net **blood flow** measured in animal testing through the invention is extraordinarily high when compared to minimum acceptable levels of net **blood flow** following traditional bypass techniques (i.e., about 25 percent of normal net **blood flow**). Further, the results are counter-intuitive and contradictory to the prior teachings of the art of U.S. Pat. Nos. 5,429,144; 5,287,861. . . et al. article. In addition, the present invention provides a conduit with a shielding area to prevent damaging impingement of **blood flow** directly onto the coronary artery wall as well as providing a blocking area to prevent the migration of debris from. . .

DETD As will be more fully described, the present invention places an

apparatus for defining a **blood flow** conduit directly from a chamber of a heart to a coronary artery downstream of an occluded site. Before describing the. . .

DETD . . . (having an open end 12a) extends perpendicularly to arms 14, 16. The entire conduit 10 is hollow to define a **blood flow** conduit 11 providing **blood flow** communication between open ends 12a, 14a and 16a.

DETD . . . within a lumen of a coronary artery on a downstream side of an occlusion with open ends 14a, 16a in **blood flow** communication with the lumen. The anchor arm 12 is adapted to extend through and be retained in a heart wall (e.g., wall of the left ventricle) with the open end 12a in **blood flow** communication with blood within the chamber. When so placed, the conduit 10 defines a surgically-placed conduit establishing direct **blood flow** from the heart chamber to the artery. By "direct" it is meant that the **blood flow** does not pass through the aorta as occurs in traditional bypass procedures. The conduit 10 is sufficiently rigid such that it defines an open **blood flow** path during both diastole and systole.

DETD . . . 26 in arm 16 near the open end 16a of the apparatus. The second bi-directional flow regulator 26 permits unimpeded **blood flow** in the direction of arrow B. The second bi-directional flow regulator 26 is used to permit a reduced (but not. . .

DETD . . . is schematically illustrated in FIGS. 18A through 19C. In each of these embodiments, the arrow A indicates the direction of **blood flow** from the left ventricle to the coronary artery.

DETD . . . 222 mounted in the anchor arm 12 of a rigid conduit 10. Valve 222 may be pivoted (in response to **blood flow** in the direction of arrow A) between a position with the plate 222 generally parallel to the walls 12 of the conduit 10 as illustrated in FIG. 18A. The plate 222 can be rotated (in response to **blood flow** reverse to arrow A) to a position angled relative to the walls 12 of the conduit 10 as illustrated in. . .

DETD . . . such that the cross-sectional area of the conduit 10 which remains open is sufficient to permit about 20% of the **blood flow** (measured volumetrically) to flow back through the conduit 10 in a direction opposite to that of arrow A during diastole. As a result, during systole, **blood flow** from the heart to the coronary artery urges the plate 222 to the full flow position of FIG. 18A such. . .

DETD . . . conduit 10 with the flow regulator 22a in the form of three leafs 222a, 222b, 222c which, in response to **blood flow** from the left ventricle to the coronary artery, open to a full open position shown in FIG. 19B and move. . .

DETD **Blood flow** through the normal coronary artery is cyclical. **Blood flow** is increased during diastole (when the heart muscle is in a relaxing state), and decreases or reverses during systole (when. . .

DETD As depicted in FIGS. 1C and 2D the bi-directional flow regulators 22, 22' provide full **blood flow** in the direction of A, which is from a chamber of a heart into the conduit 10, 10' via the. . . is during this phase of the cardiac cycle that the external pressure on the coronary artery microcirculation is also highest, **blood flow** through the lumen 11, 11' of the conduit 10, 10' could be limited. To counteract this tendency, the conduit 10,. . .

DETD . . . energy stored in 29, 29' of the CPR 24, 24' is then re-converted to kinetic energy in the form of **blood flow** out of the storage chamber 27,27' of the conduit 10, 10' via the lumen 11, 11' of arm 28, 28'. . .

DETD . . . 14', 16 of the conduit 10, 10' of the present invention should effectively approximate that diameter necessary to provide adequate **blood flow** through the downstream lumen of the conduit to effectively oxygenate the cardiac musculature normally supplied by the

microcirculation of the. . . 14', 16 of the conduit 10, 10' of the present invention should effectively approximate that diameter necessary to provide adequate **blood flow** through the lumen of the device to effectively oxygenate the cardiac musculature normally supplied by the microcirculation of the coronary. . .

DETD . . . a reduced back-flow to a full forward flow position) can be determined by the dynamic measurements of coronary artery pressure, **blood flow**, and heart chamber pressures through selective catheterization with standard techniques. See Minoru Hongo et al., 127(3) AM. HEART J. 545-51. . .

DETD The anchor arm 12, 12' is sized to maximize net **blood flow** from the left ventricle to the coronary artery. Through simulation testing, a counter-intuitive indication is that maximizing the diameter of. . . fistula (i.e., without a flow regulator 22) suggests that the smaller diameter of 1.50 mm most closely approximates normal coronary **blood flow** and minimizes back flow thus maximizing net forward flow.

DETD . . . 15 of arms 14, 14 intersects axis X--X. The region 15 acts as a deflection surface to prevent high velocity **blood flow** from arm 12 impinging directly upon the coronary artery wall. Instead, the high velocity **blood flow** impinges upon region 15 and is directed axially into the coronary artery. As a result, the coronary artery wall covered by region 15 is protected from damage which would otherwise be caused by the high velocity **blood flow** and the blood components are transitioned to axial flow with a minimum of cell damaging shear.

DETD . . . a taper. In other words, the arm 12" is widest at opening 12a". The taper and angle act to reduce **blood flow** velocity and to restrict back flow (arrows B) while facilitating forward flow (arrow A'). Also, the blood in the forward. . .

DETD Fifth, **blood flow** through the target coronary artery 30 is halted by standard techniques. For example, standard techniques include clamping the aorta above. . .

DETD Thirteenth, the clamps or sutures closing off **blood flow** to the coronary artery are released.

DETD Dependent on the degree of narrowing or occlusion of the coronary artery, standard **angioplasty**, atherectomy, or some similar procedure can be optionally performed if passage of the catheter tip 136 (FIG. 11A) is hindered. **Angioplasty**, arthrectomy, and the like could optionally precede the catheter-controlled bypass procedure.

DETD The hollow tube 71 can, but may not necessarily, be equipped with a bi-directional flow regulator 74 to provide full **blood flow** in the direction of arrow C with reduced (but not blocked) **blood flow** opposite the direction of arrow C. An array of such hollow tubes 71 of various dimensions can be available to. . .

DETD . . . the heart through a port internal to the third intraventricular catheter 71. The introduction of angiographic dye can allow the **blood flow** to be visualized under fluoroscopy, digital subtraction angiography, or similar standard techniques. By such radiographic examination, **blood flow** directly from a chamber of a heart into a coronary artery can be ascertained. In cases where a bi-directional flow. . .

CLM What is claimed:

. . . as the transition extends from the first end toward the second end, the method comprising the steps of: forming a **blood flow** pathway from the heart chamber through the heart wall and into the coronary vessel; placing the conduit in the **blood flow** pathway with the first end of the conduit proximate to and in fluid communication with the heart chamber and the. . . proximate to and in fluid communication with the coronary vessel, the first and second ends in fluid communication; and directing **blood flow** through the conduit from the first end to the second end.

2. The method of claim 1, wherein the **blood flow** pathway remains open during both systole and diastole.

4. The method of claim 1, wherein the conduit is placed in the **blood flow** path so that the first end extends into the heart chamber beyond the heart wall.

L8 ANSWER 180 OF 180 USPAT2 on STN

Full Text | Citing References

AN 2001:95525 USPAT2
TI External anastomosis operators and related systems for anastomosis
IN Blatter, Duane D., Salt Lake City, UT, United States
Goodrich, Kenneth C., Salt Lake City, UT, United States
Barrus, Michael C., Centerville, UT, United States
Burnett, Bruce M., Salt Lake City, UT, United States
PI US 6652542 B2 20031125
SUMM . . . its side is not interrupted while the anastomosis is performed. Most conventional techniques for vascular anastomosis require the interruption of **blood flow** through the receiving vessel while the anastomosis is performed.
SUMM . . . is not occluded is a patent lumen and the higher the patency of a blood vessel, the less disrupted the **blood flow** through such vessel is. A reduction of a blood vessel's patency can be caused by a stenosis, which is generally. . . can also reduce a blood vessel's patency. Reduction of blood vessel patency, and in general a disruption in a vessel's **blood flow**, can lead to ischemia, which is a local lack of oxygen in tissue due to a mechanical obstruction of the. . .
SUMM . . . an intact but contracted lumen. Placement of a stent within an occluded blood vessel is one way of performing an **angioplasty**, which is an operation for enlarging a narrowed vascular lumen. **Angioplasty** and bypass are different ways for reestablishing blood supply, an operation that is called revascularization.
SUMM . . . undesirable effects should be reduced include endothelial coverage injury, exposure of subintimal connective tissue, exposure of an intraluminal foreign component, **blood flow** interruption, irregularities at the junction, adventitial tissue stripping, intimal injury, installment of a foreign rigid body, use of materials that. . .
SUMM . . . to be anastomosed is everted by 180°; one end of the staple pierces both vessels with punctures exposed to the **blood flow** and the other end of the staple pierces the outside of the receiving vessel. U.S. Pat. No. 5,732,872 discloses a. . .
SUMM . . . intraluminal disposition is disclosed in U.S. Pat. No. 5,336,233. Because of the intraluminal disposition, this device is exposed to the **blood flow** in the anastomosed vessels. U.S. Pat. No. 4,907,591 discloses a surgical instrument for use in the installation of an assembly. . .
SUMM . . . be referred to as "Laser Tissue Interactions"); R. Viligiardi, V. Gallucci R. Pini, R. Salimbeni and S. Galiberti, Excimer Laser **Angioplasty** in Human Artery Disease, in Laser Systems in Photobiology and Photomedicine, edited by A. N. Chester, S. Martellucci and A. M. Scheggi, pp. 69-72, Plenum Press, New York, 1991; Timothy A. Sanborn, Laser **Angioplasty**, in Vascular Medicine, edited by Joseph Loscalzo, Mark A. Creager and Victor Brounwald, pp. 771-787, Little Brown Co. Whereas balloon **angioplasty** typically fractures, compresses or displaces plaque material, laser **angioplasty** typically removes plaque material by vaporizing it. Lawrence I. Deckelbaum, Cardiovascular

Applications of Laser Technology, in Laser Surgery and Medicine,. . .
SUMM . . . adventitial stripping, tissue plane malalignment, and anastomotic bleeding. In addition, techniques that rely on devices that are exposed to the **blood flow** may lead to technical problems associated with a persistent intraluminal foreign body. These factors are thought to "contribute to both. . .
SUMM . . . compression plates do not disrupt the periodic dilation of the anastomosed structures as is required by the characteristics of the **blood flow** that circulates therethrough. Moreover, the compression plate apparatus of this invention is used, together with the anvil, to evert the. . .
SUMM . . . joining the everted contour of the anastomosis fenestra with the everted edge of the graft vessel, significant exposure to the **blood flow** of the cut portion of the anastomosed structures is avoided. Furthermore, the use of the anvil in a plurality of. . .
SUMM . . . include welding, soldering, and gluing. Moreover, the signaling of the anastomosis site is preferably performed with the aid of a **mechanical device** such as the combination of a wire and an anvil.
SUMM By not requiring the interruption of **blood flow** in the receiving blood vessel, the active endoscopic or peripheral procedure of this invention advantageously reduces or even eliminates the. . . vessel. Furthermore, the exposure of the anastomosis area is reduced because no devices have to be introduced to temporarily interrupt **blood flow**. This feature advantageously enhances the minimally invasive character of the methods, systems, and apparatuses of this invention and the intervention. . .
SUMM The minimal disruption of **blood flow** in the receiving blood vessel by the active endoscopic or peripheral procedure of this invention advantageously makes it suitable in. . .
DETD . . . vessel. Further, everted portions 26 and 56 are in intima--intima contact and no cut portion is significantly exposed to the **blood flow** that is to circulate through the anastomosed structures.
DETD In addition to the results achieved, there are also significant procedural advantages. The method does not require temporary occlusion of **blood flow** to the target blood vessel. The anastomosis can be reliably created. Additionally, the anastomosis is rapidly achieved and eliminates the. . .
DETD . . . suitable size that enables it to be positioned as needed. Note that the anvil is preferably designed so that the **blood flow** through the receiving blood vessel will preferably not be interrupted during the anastomosis. However, the design can be such that the **blood flow** is interrupted when this feature is desired.
DETD . . . biocompatible non-thrombogenic material to prevent the formation of thrombi if such holding tabs or any portion thereof becomes exposed to **blood flow**. An example of such material is teflon.

```
=> e shapiro l/in
E1            1     SHAPIRO KENNETH B/IN
E2            1     SHAPIRO KRISTEN M/IN
E3            0 --> SHAPIRO L/IN
E4           13     SHAPIRO L DENNIS/IN
E5            1     SHAPIRO LARRY SAUL/IN
E6            1     SHAPIRO LAURENCE L/IN
E7            8     SHAPIRO LAWRENCE/IN
E8            2     SHAPIRO LAWRENCE S/IN
E9            1     SHAPIRO LEE/IN
E10           6     SHAPIRO LELAND/IN
E11           2     SHAPIRO LEO/IN
E12           3     SHAPIRO LEON/IN
```

```
=> s e10
L9            6 "SHAPIRO LELAND"/IN

=> d 1-6

L9   ANSWER 1 OF 6  USPATFULL on STN
```

Full Text | Citing References

```
AN      2005:123762  USPATFULL
TI      Inhibitors of serine protease activity and their use in methods and
        compositions for treatment of bacterial infections
IN      Shapiro, Leland, Denver, CO, UNITED STATES
PI      US 2005106151       A1   20050519
AI      US 2004-926051      A1   20040826 (10)
PRAI    US 2003-497703P      20030826 (60)
DT      Utility
FS      APPLICATION
LN.CNT 2713
INCL    INCLM: 424/146.100
        INCLS: 424/094.640
NCL     NCLM:  424/146.100
        NCLS:  424/094.640
IC      [7]
        ICM    A61K039-395
        ICS    A61K038-48; C12N009-64
        IPCI   A61K0039-395 [ICM,7]; A61K0038-48 [ICS,7]; C12N0009-64 [ICS,7]
        IPCR   A61K0038-43 [I,C]; A61K0038-48 [I,A]; A61K0039-395 [I,A];
               A61K0039-395 [I,C]; C12N0009-64 [I,A]; C12N0009-64 [I,C]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9   ANSWER 2 OF 6  USPATFULL on STN
```

Full Text | Citing References

```
AN      2005:26361  USPATFULL
TI      Inhibitors of serine protease activity, methods and compositions for
        treatment of viral infections
IN      Shapiro, Leland, Denver, CO, United States
PA      The Trustees of University Technology Corporation, Boulder, CO, United
        States (U.S. corporation)
PI      US 6849605          B1   20050201
AI      US 2000-518098           20000303 (9)
PRAI    US 1999-137795P      19990603 (60)
        US 1999-123167P      19990305 (60)
DT      Utility
FS      GRANTED
LN.CNT 2348
INCL    INCLM: 514/019.000
        INCLS: 514/018.000; 530/331.000
NCL     NCLM:  514/019.000
        NCLS:  514/018.000; 530/331.000
IC      [7]
        ICM    C07K005-06
        IPCI   C07K0005-06 [ICM,7]
        IPCR   A61K0038-05 [I,A]; A61K0038-05 [I,C]; A61K0038-55 [I,A];
               A61K0038-55 [I,C]
EXF     514/17-19; 514/2; 514/12; 530/331; 530/300; 530/330
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9   ANSWER 3 OF 6  USPATFULL on STN
```

Full Text | Citing References

AN 2004:280941 USPATFULL
TI Inhibitors of serine protease activity, methods and compositions for treatment of nitric oxide induced clinical conditions
IN **Shapiro, Leland**, Denver, CO, UNITED STATES
PI US 2004220242 A1 20041104
AI US 2003-427929 A1 20030502 (10)
DT Utility
FS APPLICATION
LN.CNT 2098
INCL INCLM: 514/364.000
NCL NCLM: 514/364.000
IC [7]
ICM A61K031-4245
IPCI A61K0031-4245 [ICM,7]
IPCR A61K0031-00 [I,A]; A61K0031-00 [I,C]; A61K0031-4245 [I,A]; A61K0031-4245 [I,C]; A61K0038-55 [I,C]; A61K0038-57 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 4 OF 6 USPATFULL on STN

Full Text | Citing References

AN 2004:280938 USPATFULL
TI Inhibitors of serine protease activity methods and compositions for treatment of nitric oxide-induced clinical conditions
IN **Shapiro, Leland**, Denver, CO, UNITED STATES
PI US 2004220239 A1 20041104
AI US 2003-669251 A1 20030925 (10)
RLI Division of Ser. No. US 2003-427929, filed on 2 May 2003, PENDING
DT Utility
FS APPLICATION
LN.CNT 1504
INCL INCLM: 514/362.000
INCLS: 514/364.000
NCL NCLM: 514/362.000
NCLS: 514/364.000
IC [7]
ICM A61K031-433
ICS A61K031-4245
IPCI A61K0031-433 [ICM,7]; A61K0031-4245 [ICS,7]
IPCR A61K0031-00 [I,A]; A61K0031-00 [I,C]; A61K0031-4245 [I,A]; A61K0031-4245 [I,C]; A61K0038-55 [I,C]; A61K0038-57 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 5 OF 6 USPATFULL on STN

Full Text | Citing References

AN 2004:280812 USPATFULL
TI Inhibitors of serine protease activity methods and compositions for treatment of nitric oxide-induced clinical conditions
IN **Shapiro, Leland**, Denver, CO, UNITED STATES
PI US 2004220113 A1 20041104
AI US 2003-669250 A1 20030925 (10)
RLI Division of Ser. No. US 2003-427929, filed on 2 May 2003, PENDING
DT Utility
FS APPLICATION
LN.CNT 1508
INCL INCLM: 514/019.000
INCLS: 514/364.000

```
NCL     NCLM:  514/019.000
        NCLS:  514/364.000
IC      [7]
        ICM    A61K038-04
        ICS    A61K031-4245
        IPCI   A61K0038-04 [ICM,7]; A61K0031-4245 [ICS,7]
        IPCR   A61K0031-00 [I,A]; A61K0031-00 [I,C]; A61K0031-4245 [I,A];
               A61K0031-4245 [I,C]; A61K0038-55 [I,C]; A61K0038-57 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9   ANSWER 6 OF 6  USPATFULL on STN
```

Full Text | Citing References

```
AN      2002:317414  USPATFULL
TI      Inhibitors of serine protease activity, methods and compositions for
        treatment of nitric-oxide-induced clinical conditions
IN      Shapiro, Leland, Denver, CO, United States
PA      Trustees of University of Technology Corporation, Boulder, CO, United
        States (U.S. corporation)
PI      US 6489308          B1   20021203
AI      US 2000-518097           20000303 (9)
PRAI    US 1999-123167P     19990305 (60)
        US 1999-156523P     19990929 (60)
DT      Utility
FS      GRANTED
LN.CNT 1675
INCL    INCLM: 514/045.000
        INCLS: 514/454.000; 514/423.000; 514/613.000
NCL     NCLM:  514/045.000
        NCLS:  514/423.000; 514/454.000; 514/613.000
IC      [7]
        ICM    A61K031-70
        ICS    A61K031-35; A61K031-40; A61K031-16
        IPCI   A61K0031-70 [ICM,7]; A61K0031-35 [ICS,7]; A61K0031-40 [ICS,7];
               A61K0031-16 [ICS,7]
        IPCR   A61K0038-55 [I,A]; A61K0038-55 [I,C]; A61K0038-57 [I,A]
EXF     514/458; 514/455; 514/456; 514/423; 514/45; 514/454; 514/613
CAS INDEXING IS AVAILABLE FOR THIS PATENT.


=> d hs
'HS' IS NOT A VALID FORMAT FOR FILE 'USPATFULL'

The following are valid formats:

The default display format is STD.

ABS -------- AB
ALL -------- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, PTERM, DCD,
             RLI, PRAI, DT, FS, REP, REN, EXNAM, LREP, CLMN, ECL,
             DRWN, AB, GOVI, PARN, SUMM, DRWD, DETD, CLM, INCL,
             INCLM, INCLS, NCL, NCLM, NCLS, IC, IPCI,
             IPCI-2, IPCR, EXF, ARTU
ALLG ------- ALL plus PAGE.DRAW
BIB -------- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, PTERM, DCD, RLI,
             PRAI, DT, FS, EXNAM, LREP, CLMN, ECL, DRWN, LN.CNT
BIB.EX ----- BIB for original and latest publication
BIBG ------- BIB plus PAGE.DRAW
BROWSE ----- See "HELP BROWSE" or "HELP DISPLAY BROWSE".  BROWSE must
             entered on the same line as DISPLAY, e.g., D BROWSE.
```

```
CAS -------- OS, CC, SX, ST, IT
CBIB ------- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, PRAI, DT, FS
DALL ------- ALL, delimited for post-processing
FP --------- PI, TI, IN, INA, PA, PAA, PAT, PTERM, DCD, AI, RLI,
             PRAI, IC, IPCI, IPCI-2, IPCR, INCL, INCLM, INCLS, NCL,
             NCLM, NCLS, EXF, REP, REN, ARTU, EXNAM, LREP,
             CLMN, DRWN, AB
FP.EX ------ FP for original and latest publication
FPALL ------ PI, TI, IN, INA, PA, PAA, PAT, PETRM, DCD, AI,
             RLI, PRAI, IC, IPCI, IPCI-2, IPCR, INCL, INCLM, INCLS, NCL, NCLM,
             NCLS, EXF, REP, REN, ARTU, EXNAM, LREP, CLMN, DRWN, AB,
             PARN, SUMM, DRWD, DETD, CLM
FPBIB ------ PI, TI, IN, INA, PA, PAA, PAT, PTERM, DCD, AI,
             RLI, PRAI, REP, REN, EXNAM, LREP, CLM, CLMN, DRWN
FHITSTR ---- HIT RN, its text modification, its CA index name, and
             its structure diagram
FPG -------- FP plus PAGE.DRAW
GI --------- PN and page image numbers
HIT -------- All fields containing hit terms
HITRN ------ HIT RN and its text modification
HITSTR ----- HIT RN, its text modification, its CA index name, and
             its structure diagram
IABS ------- ABS, indented with text labels
IALL ------- ALL, indented with text labels
IALLG ------ IALL plus PAGE.DRAW
IBIB ------- BIB, indented with text labels
IBIB.EX ---- IBIB for original and latest publication
IBIBG ------ IBIB plus PAGE.DRAW
IMAX ------- MAX, indented with text labels
IMAX.EX ---- IMAX for original and latest publication
IND -------- INCL, INCLM, INCLS, NCL, NCLM, NCLS, IC, IPCI, IPCI-2, IPCR,
             EXF, ARTU, OS, CC, SX, ST, IT
IPC.TAB ---- IPC in tabular format
ISTD ------- STD, indented with text labels
KWIC ------- All hit terms plus 20 words on either side
MAX -------- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, PTERM, DCD,
             RLI, PRAI, DT, FS, REP, REN, EXNAM, LREP, CLMN, ECL,
             DRWN, AB, GOVI, PARN, SUMM, DRWD, DETD, CLM, INCL,
             INCLM, INCLS, NCL, NCLM, NCLS, IC, IPCI, IPCI-2,
             IPCR, EXF, ARTU OS, CC, SX, ST, IT
MAX.EX ----- MAX for original and latest publication
OCC -------- List of display fields containing hit terms
SBIB ------- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, RLI, PRAI,
             DT, FS, LN.CNT
STD -------- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, RLI, PRAI,
             DT, FS, LN.CNT, INCL, INCLM, INCLS, NCL, NCLM, NCLS,
             IC, IPCI, IPCI-2, IPCR, EXF (STD is the default)
STD.EX ----- STD for original and latest publication
TRIAL ------ AN, TI, INCL, INCLM, INCLS, NCL, NCLM, NCLS, IC,
             IPCI, IPCI-2, IPCR

SCAN ------- AN, TI, NCL, NCLM, NCLS, IC, IPCI, IPCI-2, IPCR(random display
             without answer number.  SCAN must be entered on the
             same line as DISPLAY, e.g., D SCAN)
ENTER DISPLAY FORMAT (STD):end

=> d his full

     (FILE 'HOME' ENTERED AT 00:46:11 ON 16 FEB 2006)
```

```
     FILE 'MEDLINE' ENTERED AT 00:46:21 ON 16 FEB 2006
L1             734 SEA (THROMBOLYTIC AGENT OR THROMBOLYTIC COMPOUND)
L2          237359 SEA (ISCHEMIA-REPERFUSION INJURY OR MYOCARDIAL INFARCTION OR
                    ISCHEMIA)
L3             425 SEA L1 AND L2
                    D 400-425

     FILE 'USPATFULL, USPAT2' ENTERED AT 00:49:27 ON 16 FEB 2006
L4           17608 SEA (MECHANICAL DEVICE)
L5           47834 SEA (BLOOD FLOW)
L6           22213 SEA ANGIOPLASTY
L7             569 SEA L4 AND L5
L8             180 SEA L6 AND L7
                    D 1-180
                    D AN TI IN PI KWIC 163 167 178 180
                    E SHAPIRO L/IN
L9               6 SEA "SHAPIRO LELAND"/IN
                    D 1-6


     FILE HOME

     FILE MEDLINE
      FILE LAST UPDATED: 15 FEB 2006 (20060215/UP).  FILE COVERS 1950 TO DATE.

      On December 11, 2005, the 2006 MeSH terms were loaded.

      The MEDLINE reload for 2006 will soon be available.  For details
      on the 2005 reload, enter HELP RLOAD at an arrow promt (=>).
      See also:

         http://www.nlm.nih.gov/mesh/
         http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html
         http://www.nlm.nih.gov/pubs/techbull/nd05/nd05_med_data_changes.html
         http://www.nlm.nih.gov/pubs/techbull/nd05/nd05_2006_MeSH.html

      OLDMEDLINE is covered back to 1950.

      MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
      MeSH 2006 vocabulary.

      This file contains CAS Registry Numbers for easy and accurate

     FILE USPATFULL
     FILE COVERS 1971 TO PATENT PUBLICATION DATE: 14 Feb 2006 (20060214/PD)
     FILE LAST UPDATED: 14 Feb 2006 (20060214/ED)
     HIGHEST GRANTED PATENT NUMBER: US7000250
     HIGHEST APPLICATION PUBLICATION NUMBER: US2006031974
     CA INDEXING IS CURRENT THROUGH 14 Feb 2006 (20060214/UPCA)
     ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 14 Feb 2006 (20060214/PD)
     REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2005
     USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2005


     FILE USPAT2

     FILE COVERS 2001 TO PUBLICATION DATE: 14 Feb 2006 (20060214/PD)
     FILE LAST UPDATED: 14 Feb 2006 (20060214/ED)
     HIGHEST GRANTED PATENT NUMBER: US2005229256
     HIGHEST APPLICATION PUBLICATION NUMBER: US2006031757
```

```
CA INDEXING IS CURRENT THROUGH 14 Feb 2006 (20060214/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 14 Feb 2006 (20060214/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Dec 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2005


=>
```